



MOBILE INCIDENT INVESTIGATION TOOL USER MANUAL

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Overview

The Mobile Investigation Tool is designed in a very practical and user-friendly manner to be used on any Mobile Device when conducting Incident Investigations. It is aligned with OHSAS 18001 requirements and was incubated by us subsequent to investigating more than 300 fatal and serious injuries over the past few years.

Advantages of the Tool

- Registered companies will have a centralised Administrator to control your entries.
- A Company can purchase as many User Licences as they deem necessary.
- Once entries have been made by a User changes to such entries can only be done with the authorisation of the registered Administrator.
- It guides the Investigator through a structured investigation process which is aligned with OHSAS 18001 requirements.
- All captured information will be secure and only each registered company will have access to its own information.
- Reports are automatically generated for each investigation; graphs for trends and analyses are also available.
- Should you be out in the field conducting an investigation, you can simply click on the *email* icon at the end of the investigation and the report will immediately be emailed to you for subsequent internal distribution at your or your company's discretion.

Application of the Mobile Investigation Tool

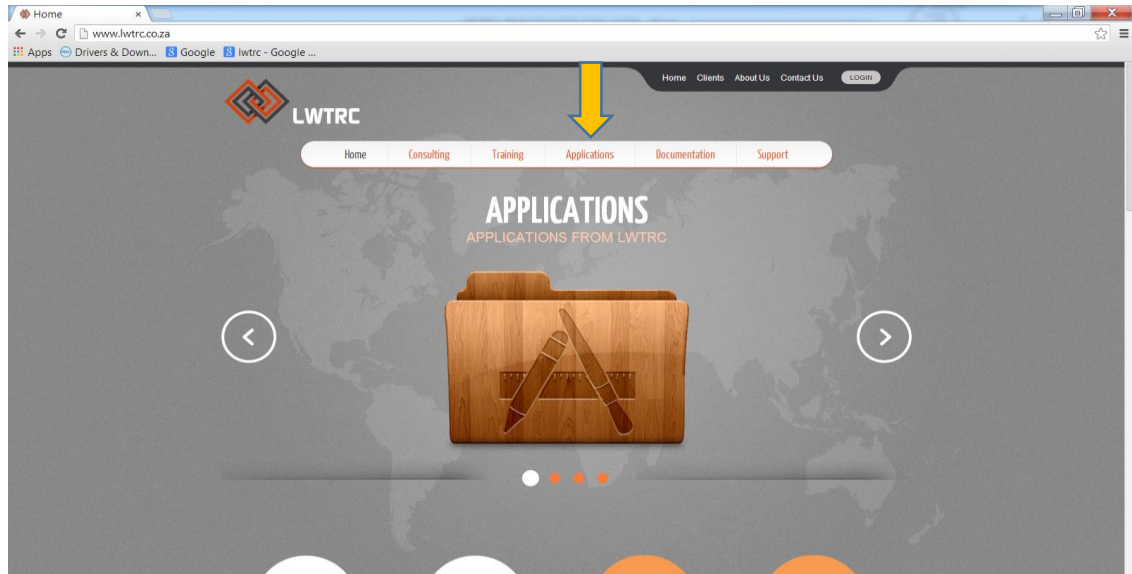
To note: It is of utmost importance that persons using this Incident Investigation Tool for Mobile Devices understand the elements of management systems and their interaction with each other.

A two day Training Programme on the investigation process and application of the tool is available. During the training process delegates will be familiarised with the basic understanding of management system elements and their requirements.

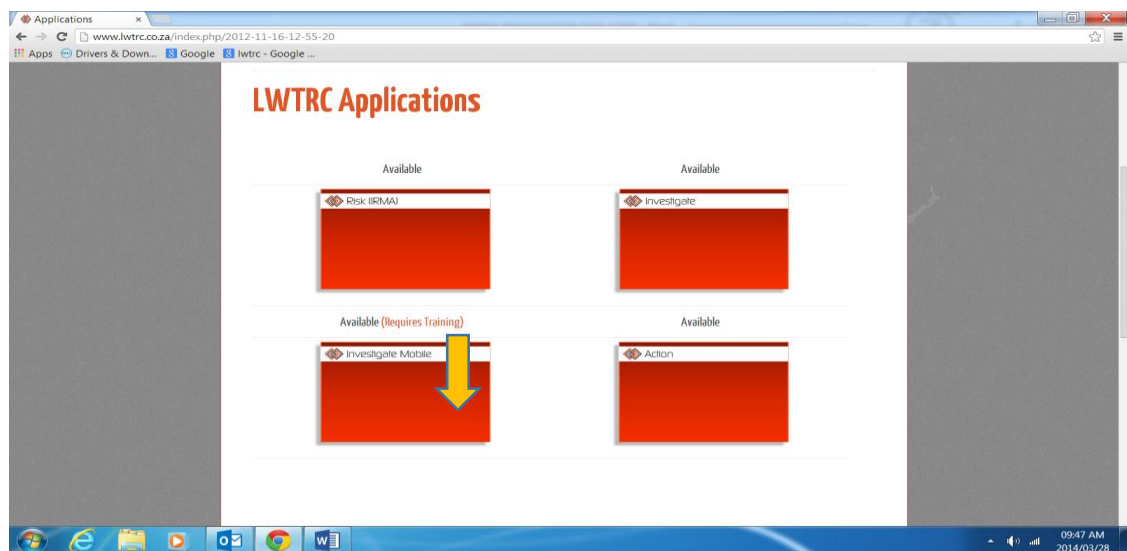
1. In order to get access to the tool follow these steps; (Registration)

1.1. Open <http://lwtrc.co.za/> website on Google or <http://lwtrc.co.za/?view=featured> when using Internet Explorer.

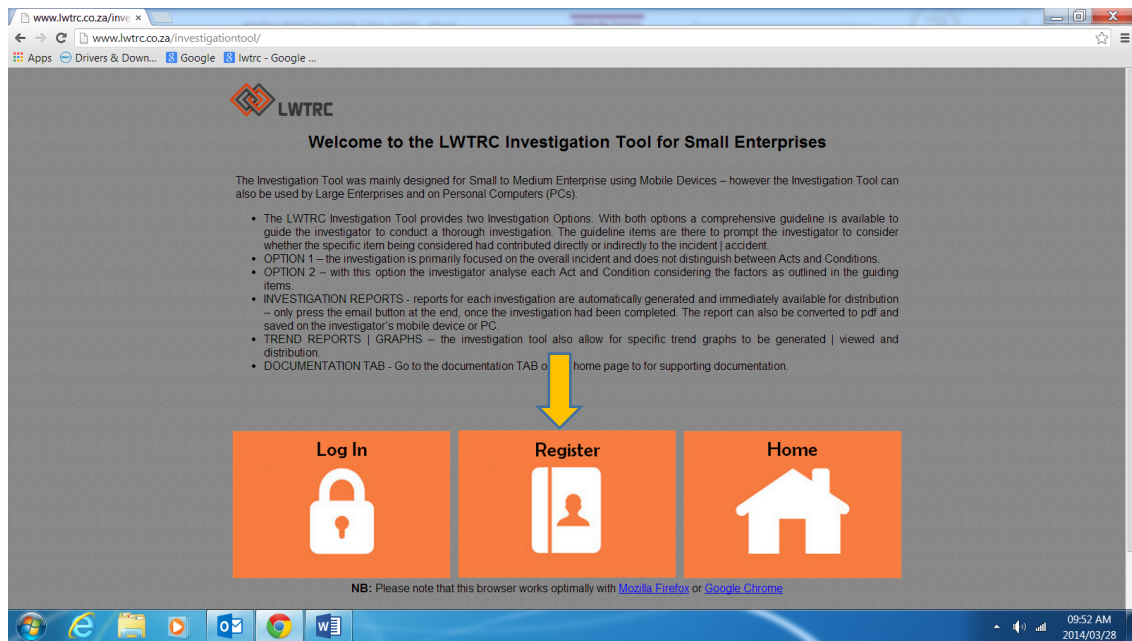
1.2. “Click” on Applications.



1.3. “Click” on 3rd icon “Investigate Mobile”.



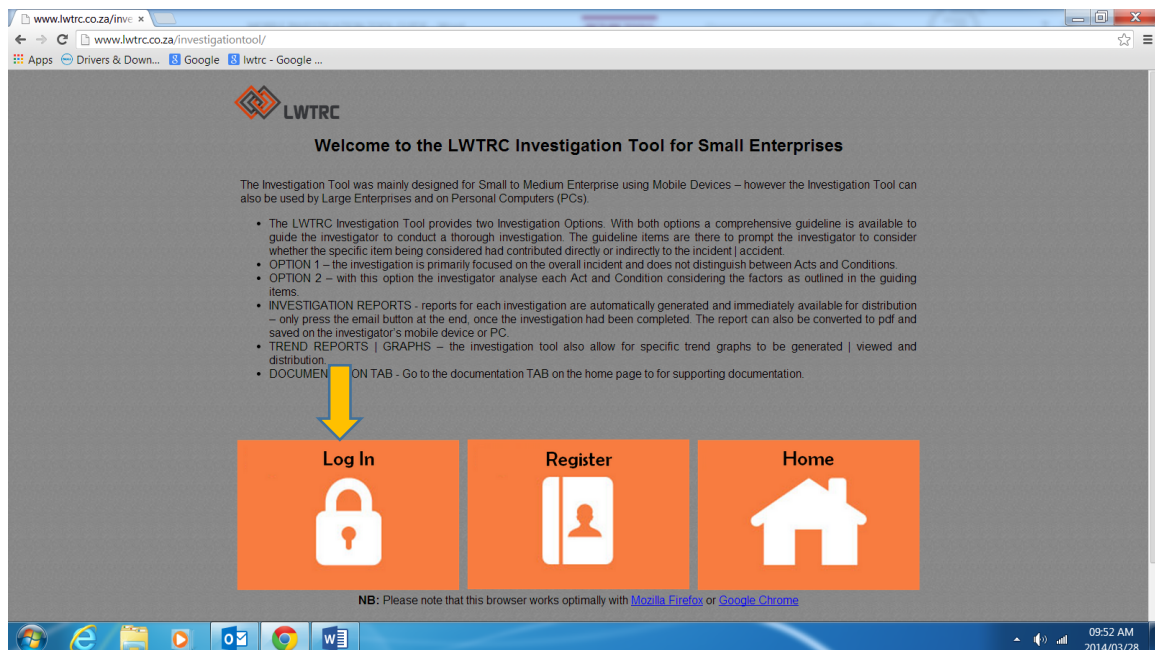
1.4. “Click” Register your company and enter information as required and submit. Create your own unique Username and Password. “Click” OK for registration. You are now registered as the “Administrator” for your company. The Administrator can register as many users in the specific company corresponding with the amount of licences purchased.



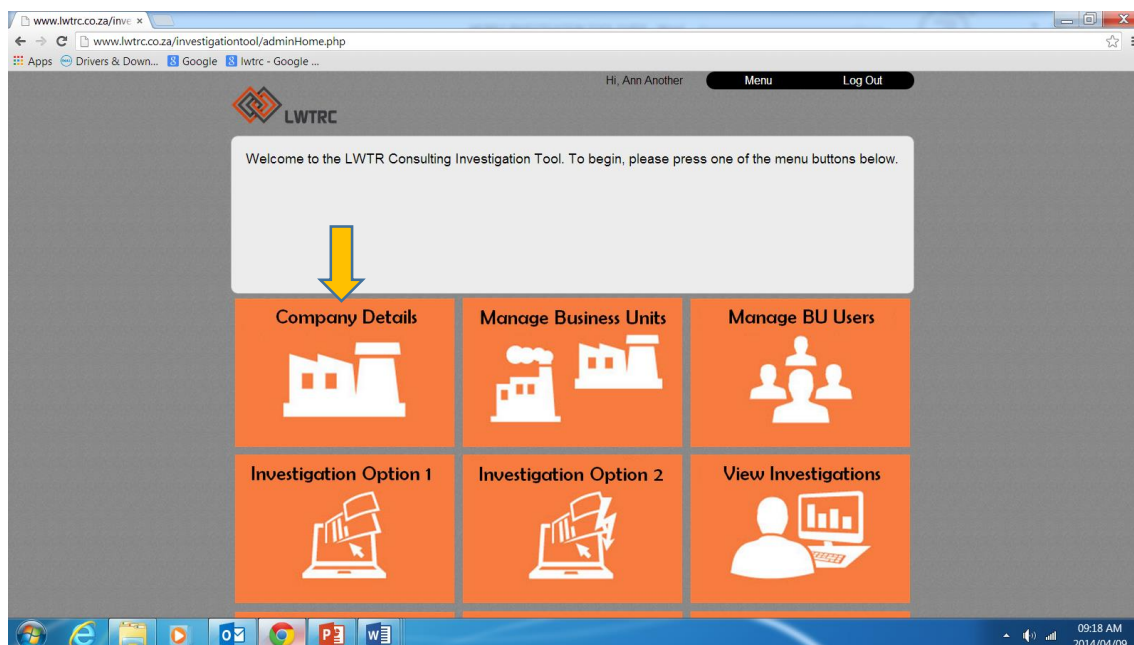
1.5. Await return e-mail from LWTRC which will confirm that your company have been registered with LWTR Consulting. Activation will be done by LWTRC once payment confirmation is received.

2. Application of the Incident Investigation Mobile Tool; (Administrator)

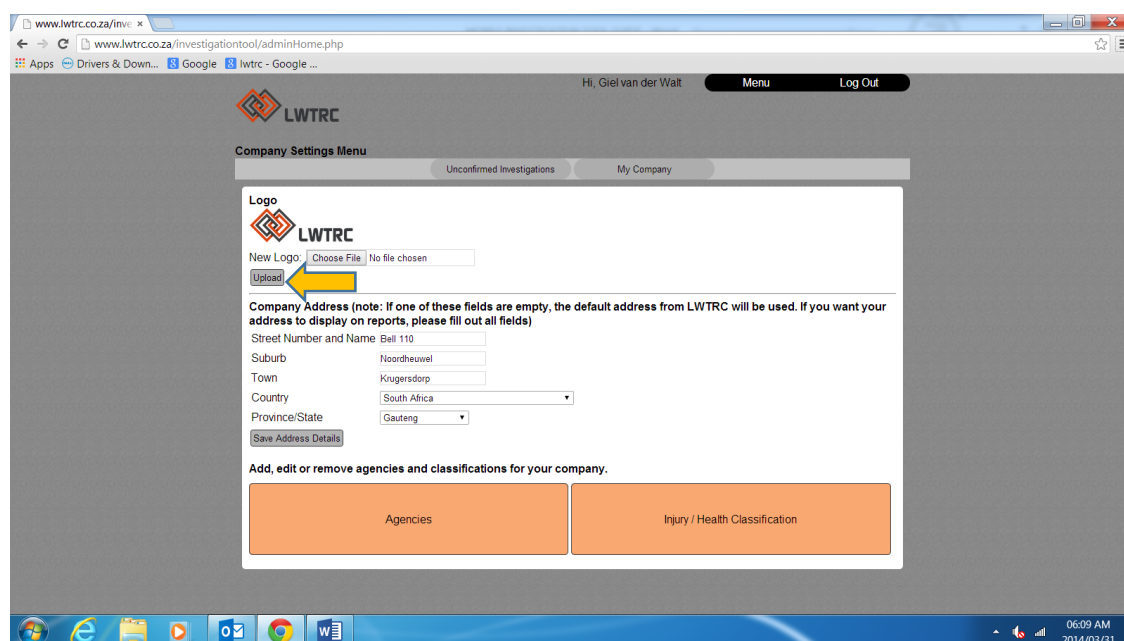
2.1. Log in (Enter you User Name and Password).



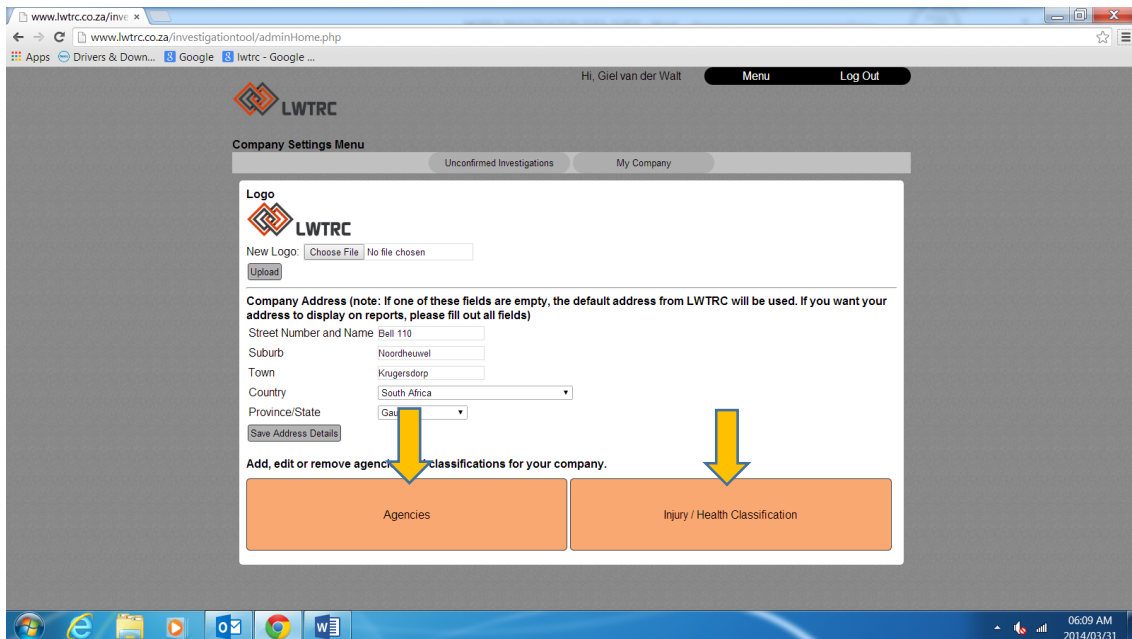
2.2. Enter your Company details.



2.3. “Click on “Upload” and insert your Company’s Logo.



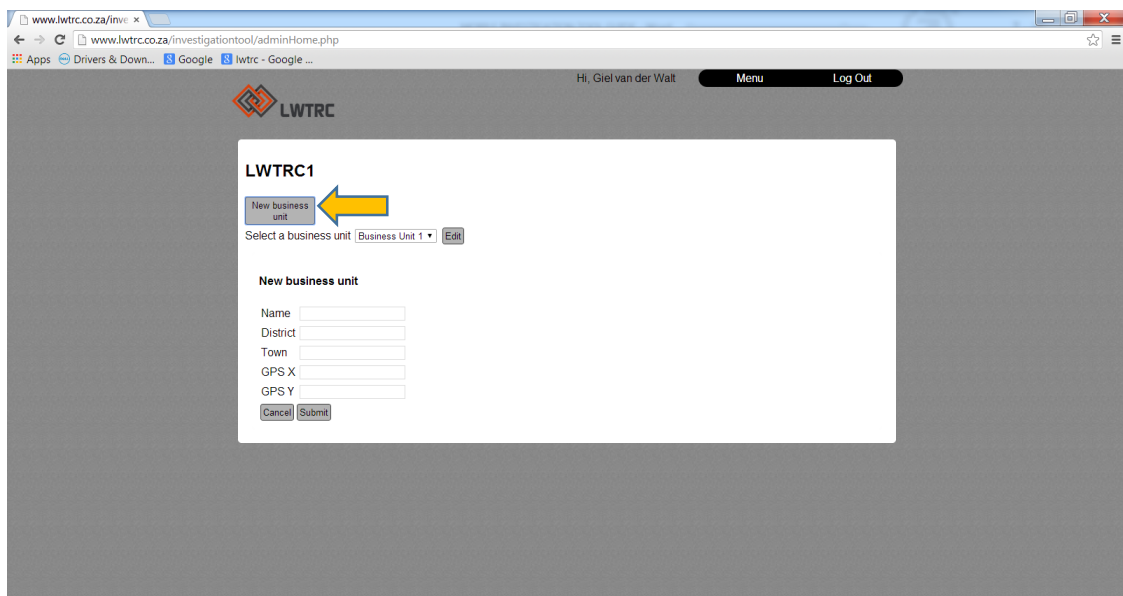
2.4. Add agencies and Injury / Health classification applicable / used to / within company. Return to “Menu” at top of the screen.



The screenshot shows the 'Company Settings Menu' in a web browser. The page has a header with the LWTRC logo and navigation links 'Menu' and 'Log Out'. Below the header, there are tabs for 'Unconfirmed Investigations' and 'My Company'. The 'My Company' tab is active, showing a 'Logo' section with a 'New Logo' upload button. Below this is the 'Company Address' section with fields for 'Street Number and Name', 'Suburb', 'Town', 'Country', and 'Province/State'. A note states: 'If one of these fields are empty, the default address from LWTRC will be used. If you want your address to display on reports, please fill out all fields'. At the bottom, there are two orange buttons: 'Agencies' and 'Injury / Health Classification'. Yellow arrows point from the 'Save Address Details' button to the 'Agencies' button, and from the 'Injury / Health Classification' button to the 'Injury / Health Classification' button.

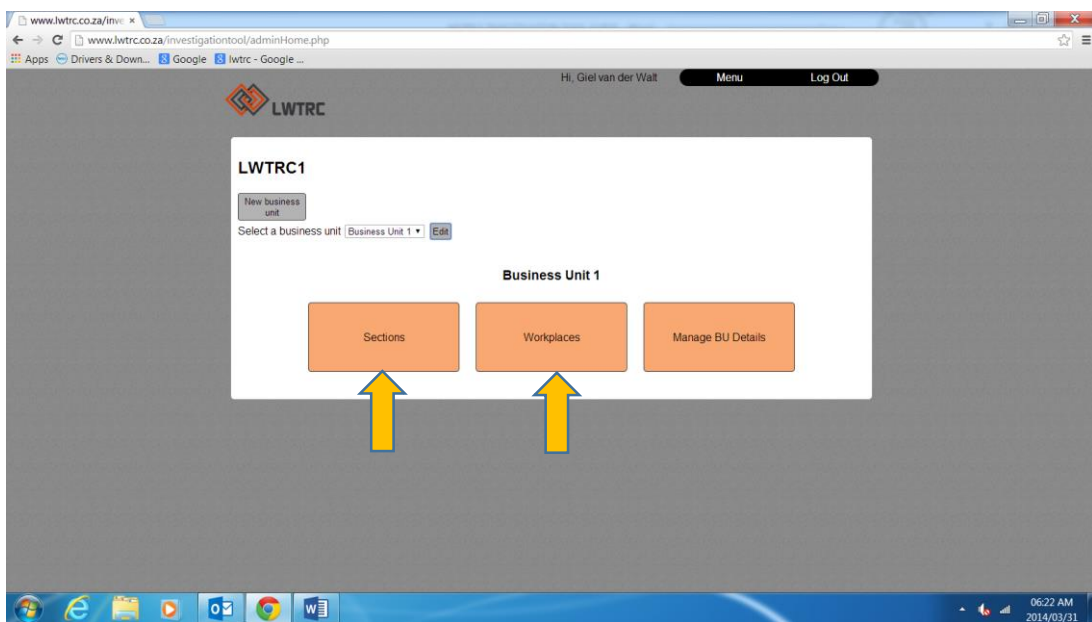
2.5. If your company has more than one Business Unit “click” on Business Units. Return to “Menu”.

2.6. “Click” on “New Business Unit” to add Business Units (only applicable if the company has more than one Business Unit). This button must be clicked every time. When a Business Unit’s information is entered click “submit” to save the information.



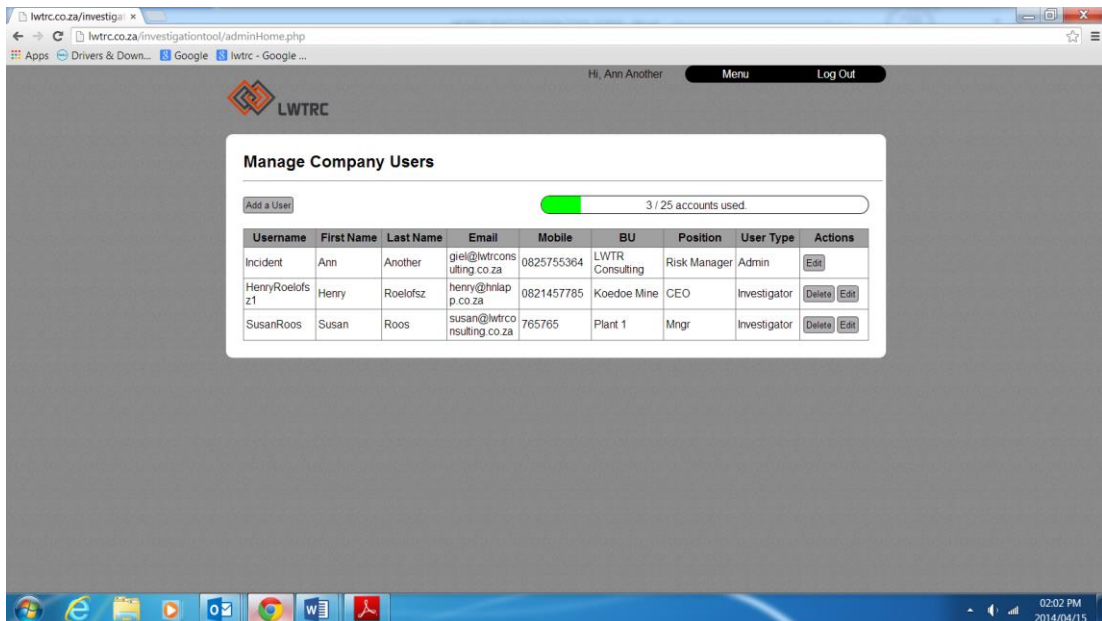
The screenshot shows the 'LWTRC1' form for adding a new business unit. The form has a header with the LWTRC logo and navigation links 'Menu' and 'Log Out'. Below the header, there is a 'New business unit' button with a yellow arrow pointing to it. Below this button is a 'Select a business unit' dropdown menu. The form is titled 'New business unit' and contains fields for 'Name', 'District', 'Town', 'GPS X', and 'GPS Y'. At the bottom, there are 'Cancel' and 'Submit' buttons.

- 2.7.** When all Business Units are entered go to “Select a Business Unit”. Click on Business Unit 1 and then on “edit”. Three blocks will appear underneath the name of the Business Unit. Enter information with regard to Sections (This can be areas or disciplines) and workplaces related to the specific Business Unit. The third icon “Managed Business Unit Details” is only used once changes must be made to the details entered previously related the specific Business Unit. This process must be followed for all Business Units.



Next to each Section and Workplace added there will be two icons – a pencil and a red cross. To review Sections and workplaces added use the pencil to change entries made related to Sections and Workplaces. The red cross can be used to delete a Section or Workplace. Return to the “Menu”.

- 2.8.** “Click” on “Manage BU Users and add Users (Investigators) as required. Notifications will be received via e-mail as BU Users are entered onto the system. Users can only be added by an Administrator.



- 2.9. Up to this point the Company Administrator made all entries and only he/she will be able to edit or change any information entered into the system. Back to menu. The system is now be ready to conduct investigations. Take note that when information is entered into text boxes they can be opened to fit the amount of information entered. This is done by placing the cursor on the lines in the right hand side bottom corner of the text box, click left and pull the box open.

3. Start / conduct an incident Investigation

One of two options to conduct an investigation can now be selected when using this tool to conduct an incident investigation;

INVESTIGATION OPTION 1

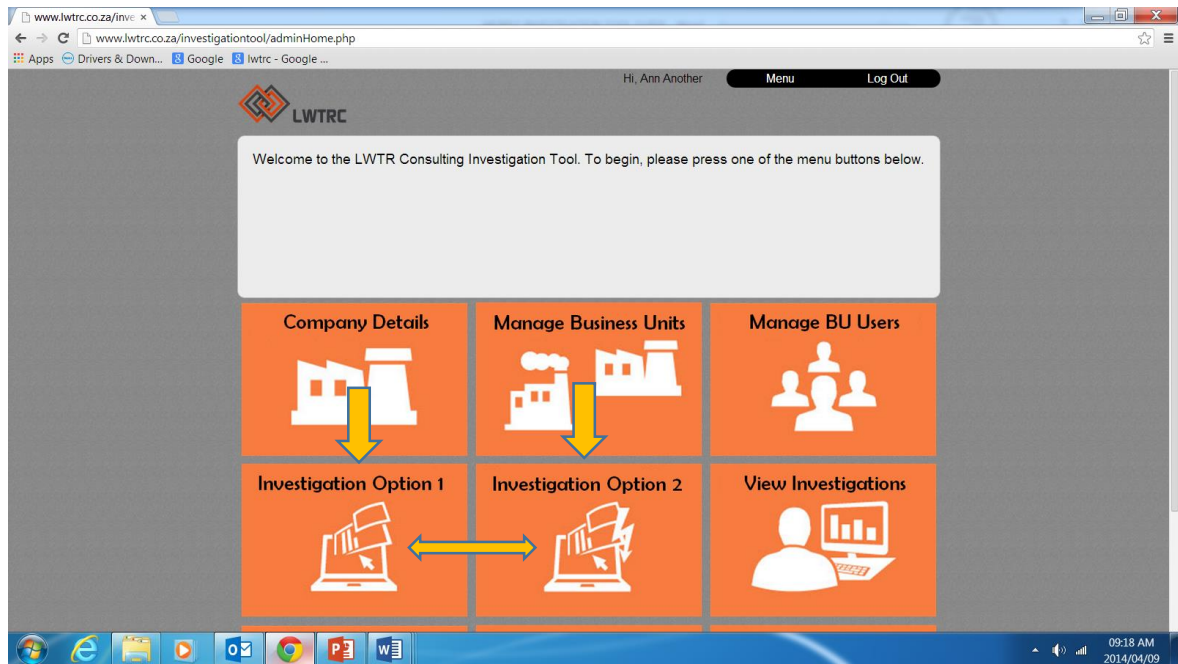
Identifying causes using the overall incident | accident description as the base of the investigation and considering all the potential causal factors. There are a total of 74 causal factors to be considered and each one should be carefully considered. A "Read More" option is available for each causal factor if the investigator needs any further guidance on any causal factor.

NOTE: do not be discouraged by the number of causal factors as the investigator will soon become familiar with these causal factors and the process will become much faster.

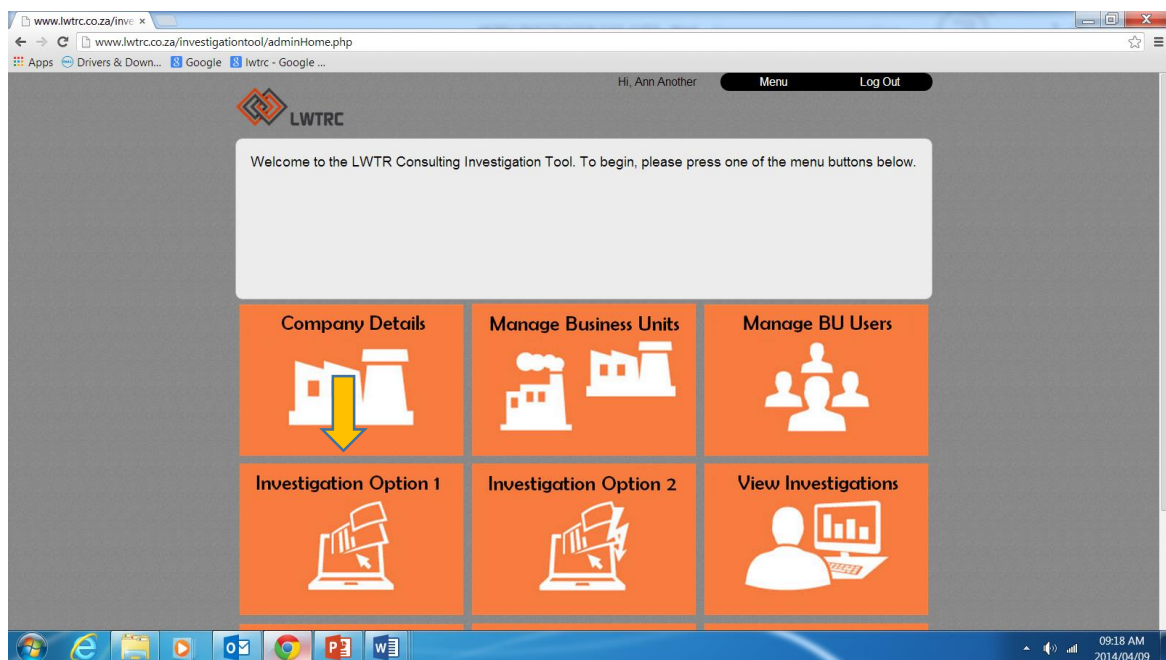
OR

INVESTIGATION OPTION 2

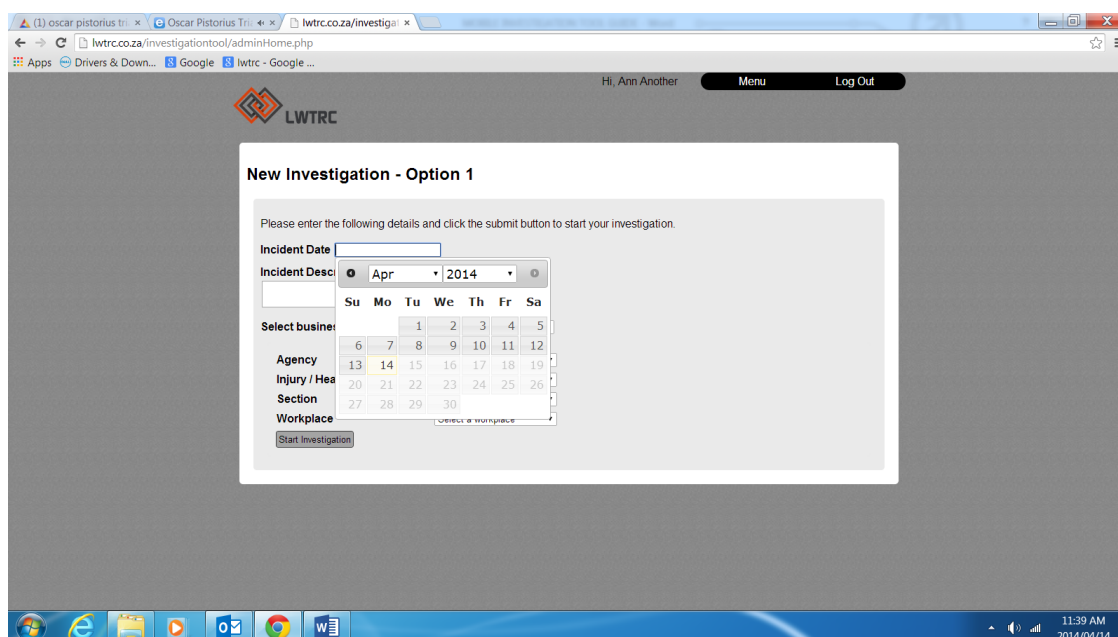
Identifying causes for each Act and Condition that have contributed directly or indirectly to the incident | accident considering all the potential causal factors. In this case all 74 causal factors need to be considered for each unsafe act and unsafe condition that contributed to the event.



3.1. “New Investigation – Option 1” process;



3.1.1. Select the "Incident Date" on the calendar provided.



New Investigation - Option 1

Please enter the following details and click the submit button to start your investigation.

Incident Date:

Incident Description:

Select business unit:

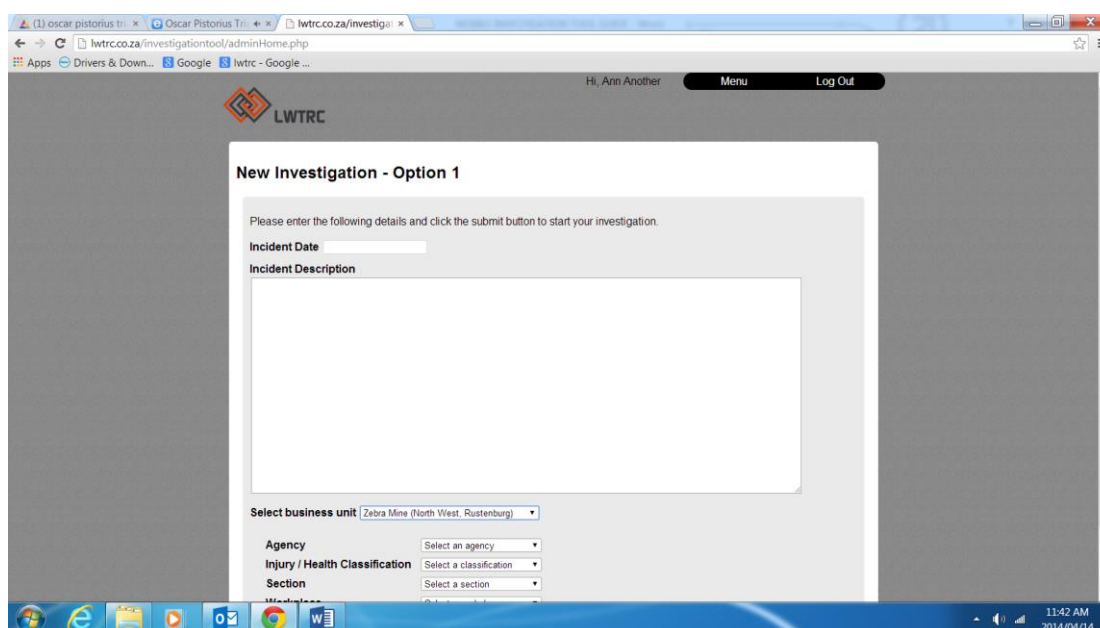
Agency:

Injury / Health Classification:

Section:

Workplace:

3.1.2. Insert the incident description. Describe the event in as much detail as possible based on the information gathered. Place your cursor on the two lines in the right hand bottom corner of the text box and draw it to the required size to display all the text entered.



New Investigation - Option 1

Please enter the following details and click the submit button to start your investigation.

Incident Date:

Incident Description:

Select business unit:

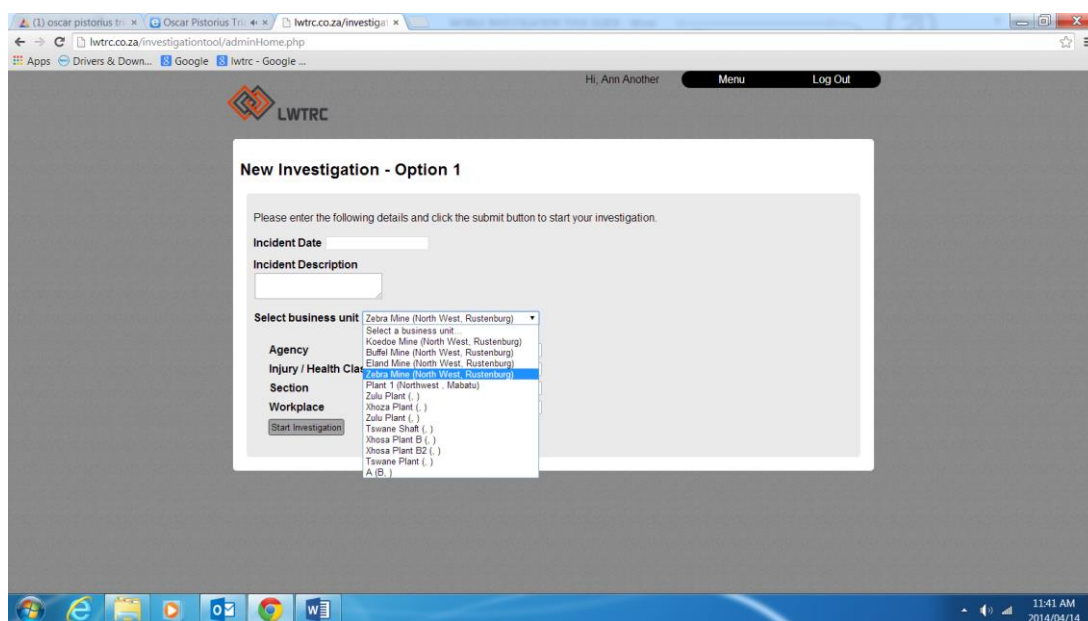
Agency:

Injury / Health Classification:

Section:

Workplace:

3.1.3. Select the Business Unit on which the incident occurred.



New Investigation - Option 1

Please enter the following details and click the submit button to start your investigation.

Incident Date

Incident Description

Select business unit

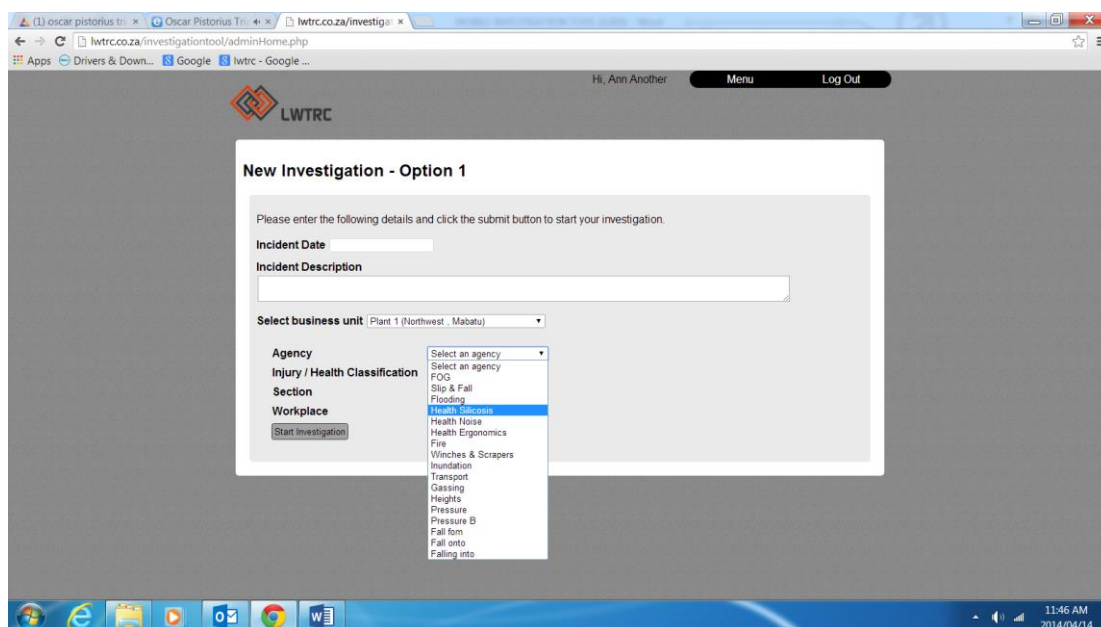
Agency

Injury / Health Classification

Section

Workplace

3.1.4. Select the “Agency” related to the specific event.



New Investigation - Option 1

Please enter the following details and click the submit button to start your investigation.

Incident Date

Incident Description

Select business unit

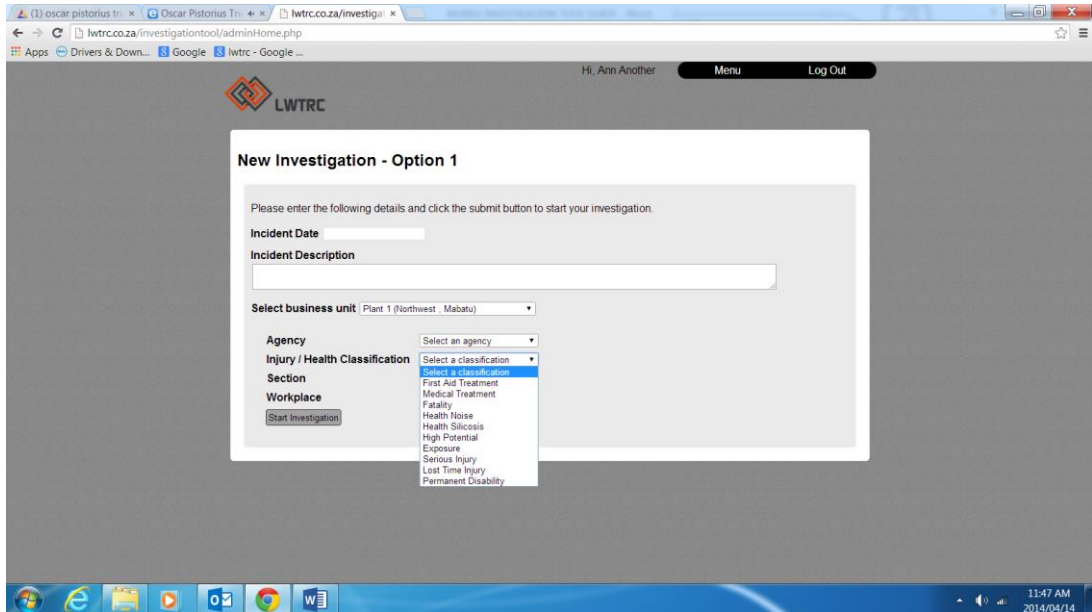
Agency

Injury / Health Classification

Section

Workplace

3.1.5. Select the “Injury / Health Classification” related to the event.



New Investigation - Option 1

Please enter the following details and click the submit button to start your investigation.

Incident Date

Incident Description

Select business unit

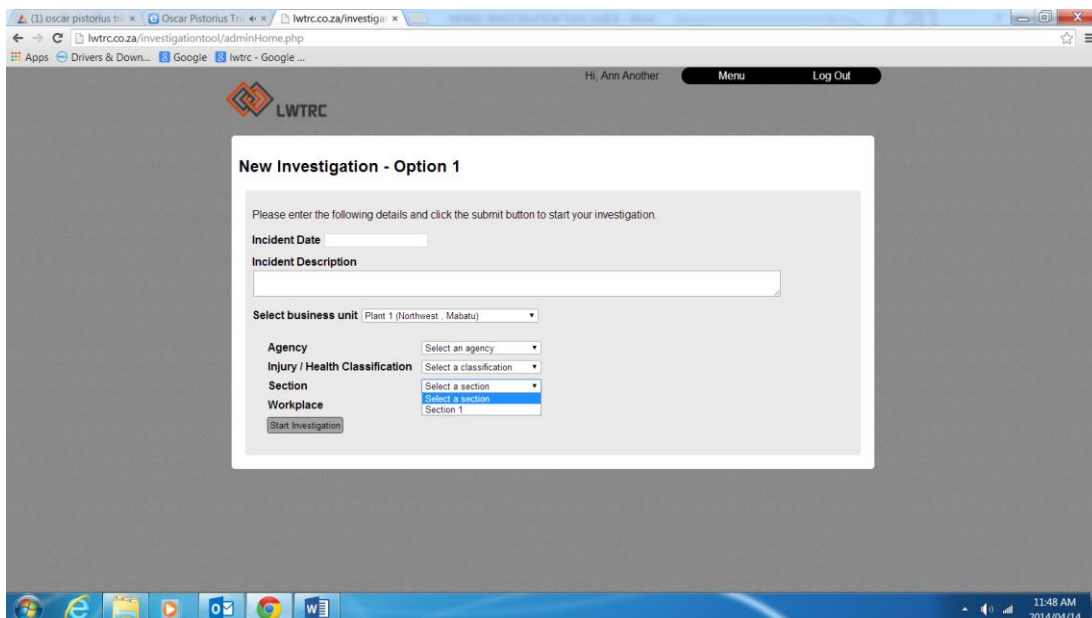
Agency

Injury / Health Classification

Section

Workplace

3.1.6 Select the Section / Department / area in which the event occurred.



New Investigation - Option 1

Please enter the following details and click the submit button to start your investigation.

Incident Date

Incident Description

Select business unit

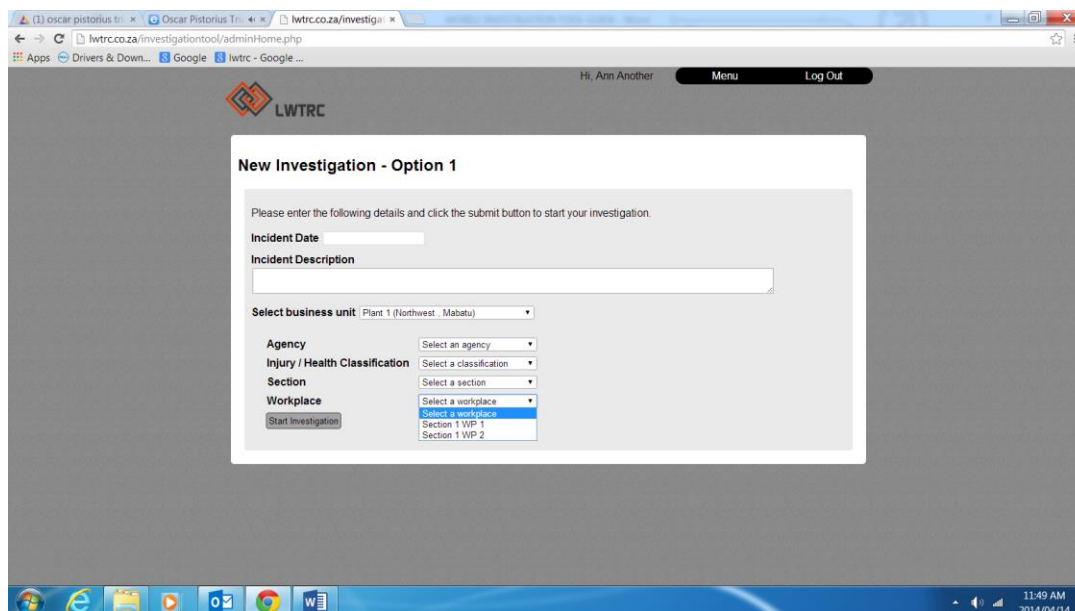
Agency

Injury / Health Classification

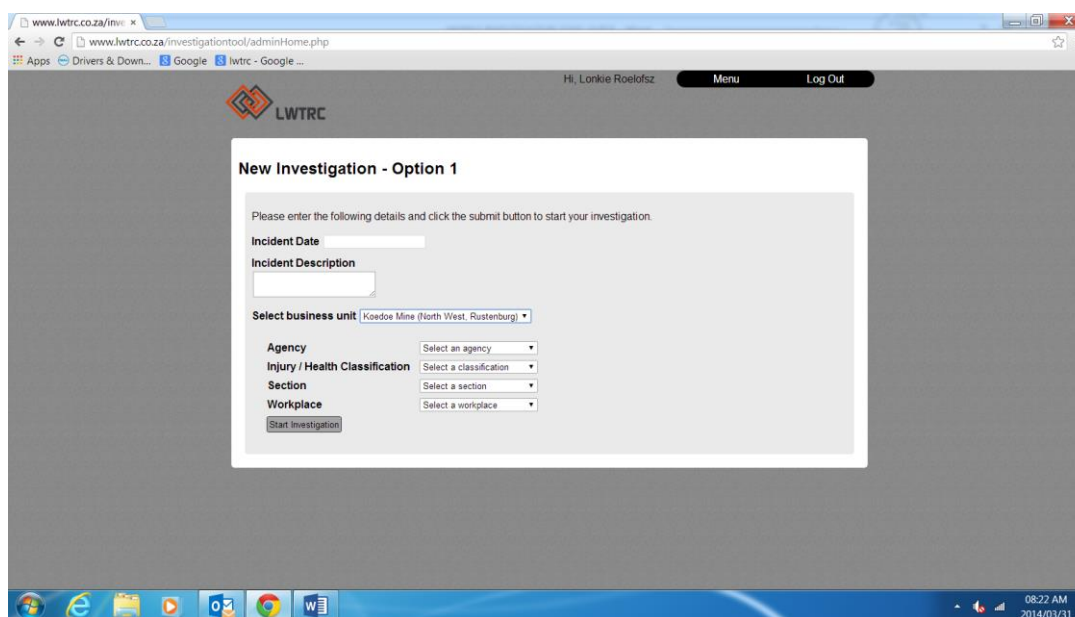
Section

Workplace

3.1.7. Select the workplace where the incident occurred.



3.1.8. “Click” on “Start Investigation”.



Based on evidence gathered a checklist must now be completed. A total of 72 questions form part of the checklist which are divided into the following categories;

People Factors **(PF)** – 11 Questions.

Work / Job factors **(WF)** – 21 Questions

System Factors (Leadership) **(SF – L)** – 7 Questions

System Factors (HIRA + Planning) **(SF – HIRA)** – 4 Questions
 System Factors (Implementation) **(SF- I)** – 12 Questions
 System Factors (Checking+Review) **(SF–C+R)**– 10 Questions
 Risk Assessment **(SF- RA)**

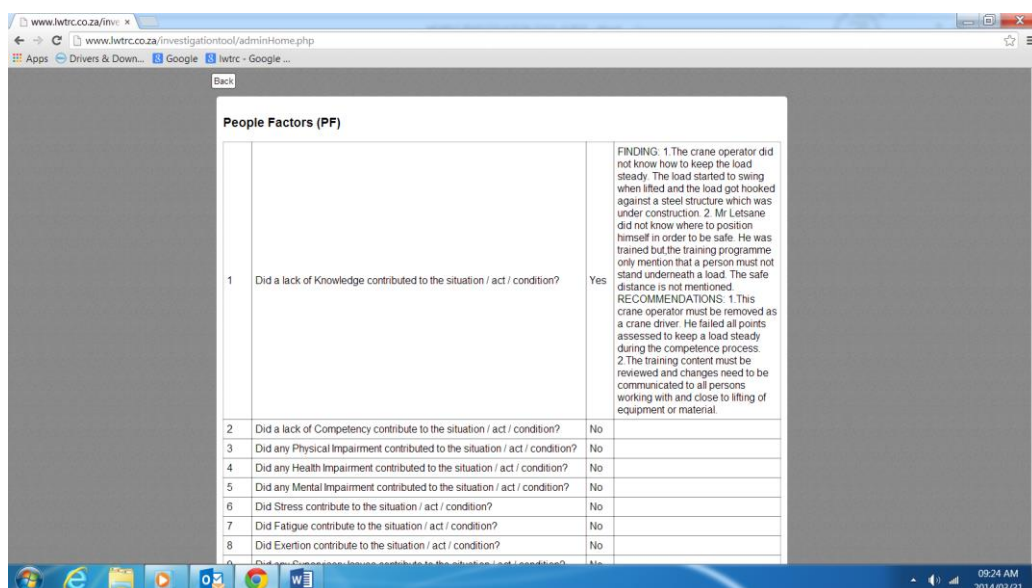
To save space of the abovementioned abbreviations as they are used on the different graphs.

TAKE NOTE:

It is of critical importance that the investigator does not use the checklist as a “tick” list. All blocks ticked that are applicable to the specific event must be clearly described in the column on the right. Information entered must be descriptive in terms of findings related to and based on facts gathered during the investigation and NOT assumptions.

3.1.9. Identify, tick and describe each contributing factor by going through the list of 74 questions contributing factors. During this part of the process it is essential to make entries on facts / evidence gathered prior completion of the report.

Each item / question selected on the checklist must clearly motivated through a detailed description in the text box column on the right-hand side of the page. It is recommended to save information entered related to each contributing factor (Findings and recommendations). This is done by going down to the bottom of the document and click on “Submit”.



The screenshot shows a web browser window with the URL www.lwtrc.co.za/investigationtool/adminHome.php. The main content area is titled "People Factors (PF)" and contains a checklist of 8 questions. The first question, "Did a lack of Knowledge contributed to the situation / act / condition?", is marked with a "Yes" in the "Yes/No" column. The right-hand side of the form contains a "FINDING" section and a "RECOMMENDATIONS" section, both of which are populated with text. The "FINDING" section describes a crane operator's lack of knowledge, and the "RECOMMENDATIONS" section suggests removing the operator and reviewing training. The bottom of the browser window shows the Windows taskbar with various application icons and the system clock indicating 09:24 AM on 2014/03/11.

Question	Yes/No	Findings and Recommendations
1 Did a lack of Knowledge contributed to the situation / act / condition?	Yes	FINDING: 1.The crane operator did not know how to keep the load steady. The load started to swing when lifted and the load got hooked against a steel structure which was under construction. 2. Mr Letsame did not know where to position himself in order to be safe. He was trained but the training programme only mention that a person must not stand underneath a load. The safe distance is not mentioned. RECOMMENDATIONS: 1.This crane operator must be removed as a crane driver. He failed all points assessed to keep a load steady during the competence process. 2 The training content must be reviewed and changes need to be communicated to all persons working with and close to lifting of equipment or material.
2 Did a lack of Competency contribute to the situation / act / condition?	No	
3 Did any Physical Impairment contributed to the situation / act / condition?	No	
4 Did any Health Impairment contributed to the situation / act / condition?	No	
5 Did any Mental Impairment contributed to the situation / act / condition?	No	
6 Did Stress contribute to the situation / act / condition?	No	
7 Did Fatigue contribute to the situation / act / condition?	No	
8 Did Exertion contribute to the situation / act / condition?	No	

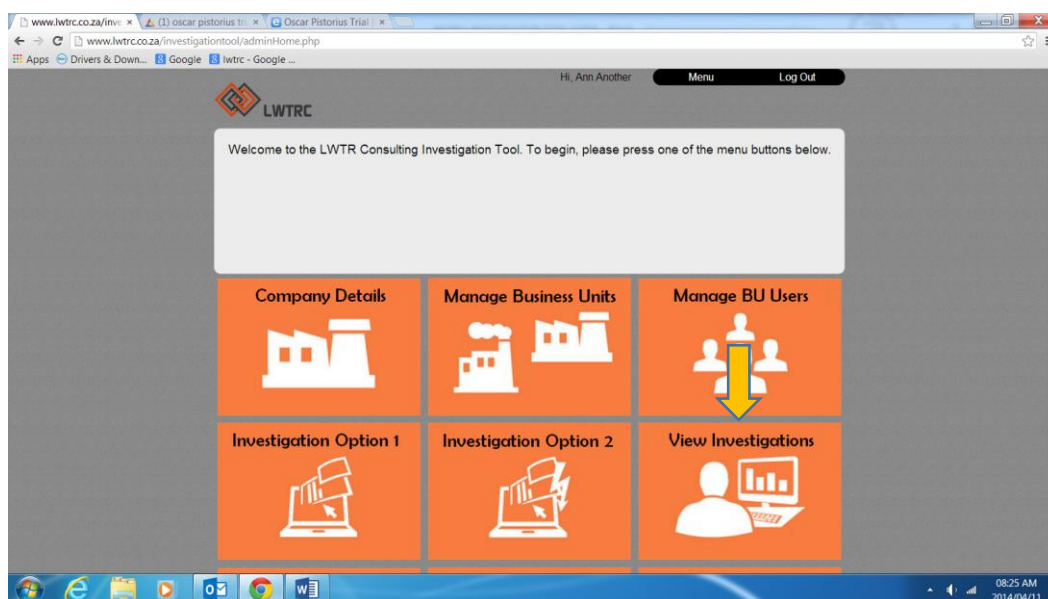
If the Investigator needs more information with regard to the understanding or meaning of a specific question click on the “Read More” box.

The abbreviations mentioned above for each category covered on the checklist are used on the graphs when the analyses of the information entered is done.

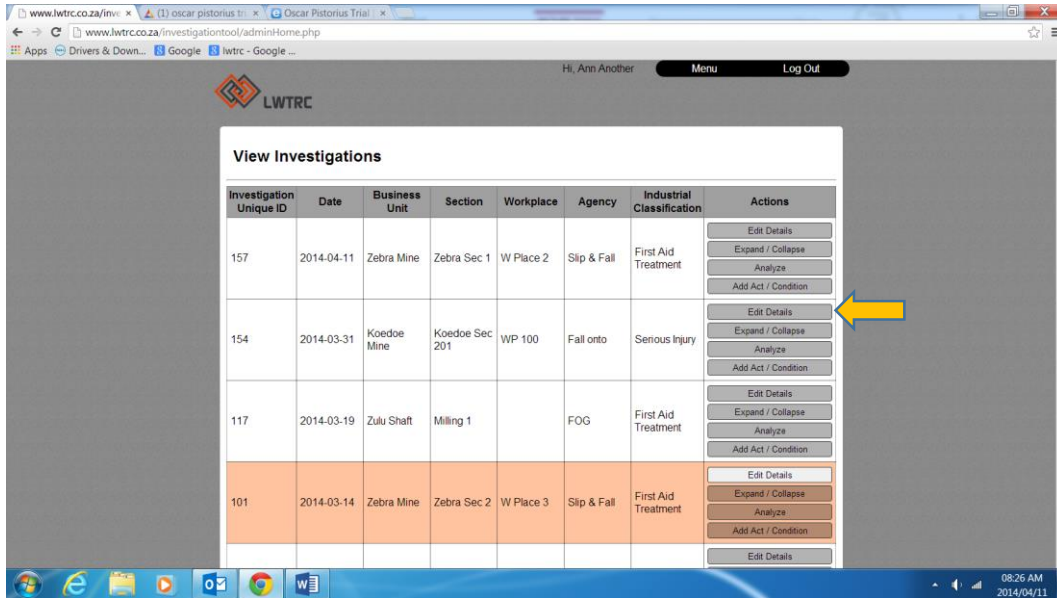
- Once the questionnaire is completed click the “**Submit**” icon at the bottom of the page to save information entered.

4. View Investigations

Once submitted the information entered can be viewed under “**View Investigations**” where a summary of all investigations entered can be viewed.

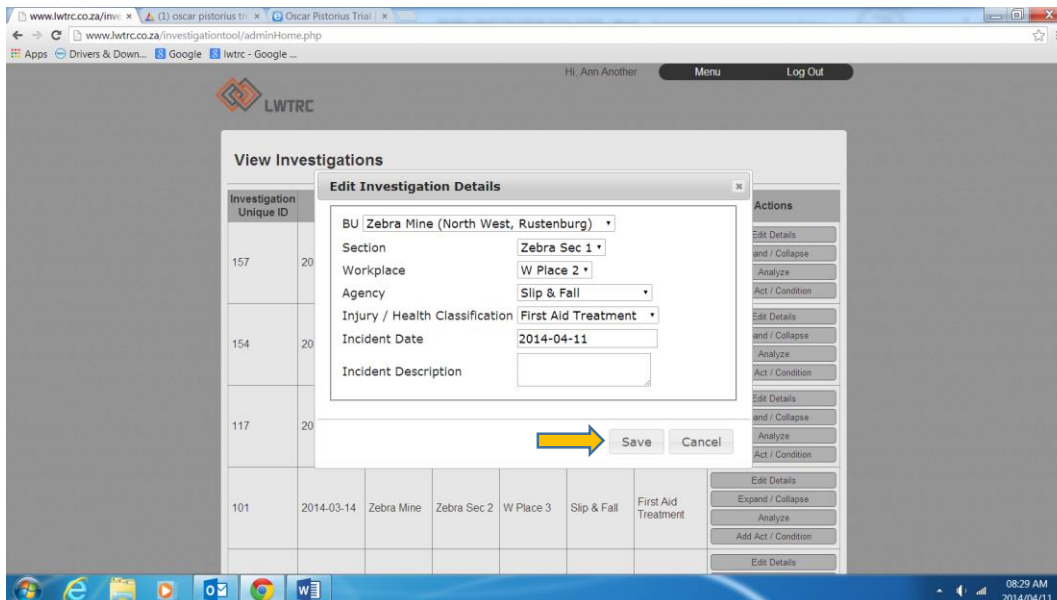


4.1.7. Under the column on the right with the heading “**Actions**” there are four different options to select from;



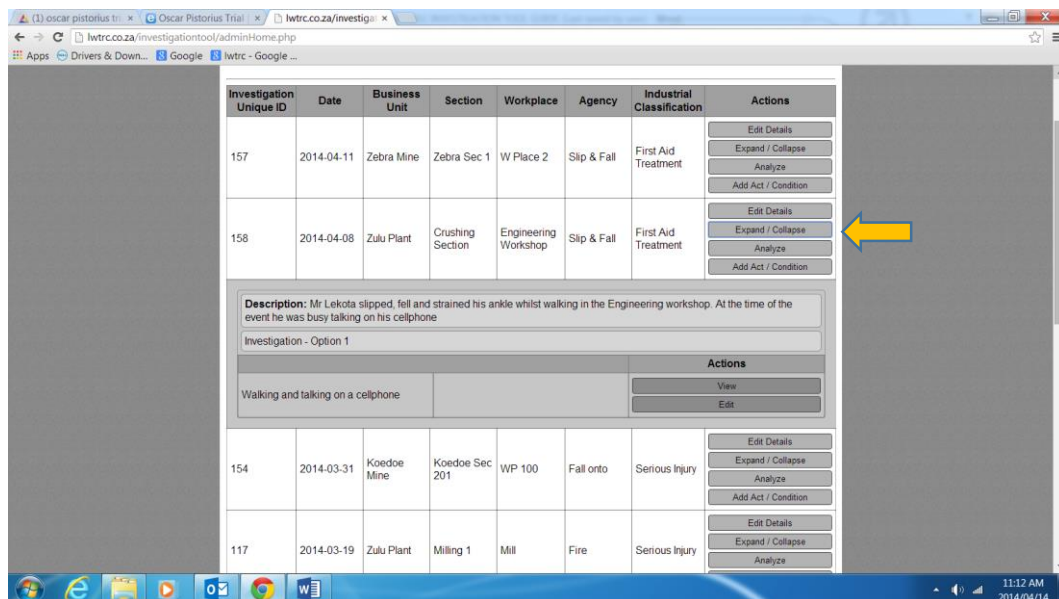
Investigation Unique ID	Date	Business Unit	Section	Workplace	Agency	Industrial Classification	Actions
157	2014-04-11	Zebra Mine	Zebra Sec 1	W Place 2	Slip & Fall	First Aid Treatment	Edit Details Expand / Collapse Analyze Add Act / Condition
154	2014-03-31	Koedoe Mine	Koedoe Sec 201	WP 100	Fall onto	Serious Injury	Edit Details Expand / Collapse Analyze Add Act / Condition
117	2014-03-31	Zulu Shaft	Milling 1		FOG	First Aid Treatment	Edit Details Expand / Collapse Analyze Add Act / Condition
101	2014-03-14	Zebra Mine	Zebra Sec 2	W Place 3	Slip & Fall	First Aid Treatment	Edit Details Expand / Collapse Analyze Add Act / Condition

“**Edit details**” – If the need be information entered i.e. Business Unit name, Section / department, Workplace, Agency, Injury / Health Classification, Incident date and Incident Description can be reviewed / changed. If changes were made click “Save”.



Investigation Unique ID	Date	Business Unit	Section	Workplace	Agency	Industrial Classification	Actions
157	20						Edit Details Expand / Collapse Analyze Add Act / Condition
154	20						Edit Details Expand / Collapse Analyze Add Act / Condition
117	20						Edit Details Expand / Collapse Analyze Add Act / Condition
101	2014-03-14	Zebra Mine	Zebra Sec 2	W Place 3	Slip & Fall	First Aid Treatment	Edit Details Expand / Collapse Analyze Add Act / Condition

“Expand / Collapse”



Investigation Unique ID	Date	Business Unit	Section	Workplace	Agency	Industrial Classification	Actions
157	2014-04-11	Zebra Mine	Zebra Sec 1	W Place 2	Slip & Fall	First Aid Treatment	Edit Details Expand / Collapse Analyze Add Act / Condition
158	2014-04-08	Zulu Plant	Crushing Section	Engineering Workshop	Slip & Fall	First Aid Treatment	Edit Details Expand / Collapse Analyze Add Act / Condition

Description: Mr Lekota slipped, fell and strained his ankle whilst walking in the Engineering workshop. At the time of the event he was busy talking on his cellphone

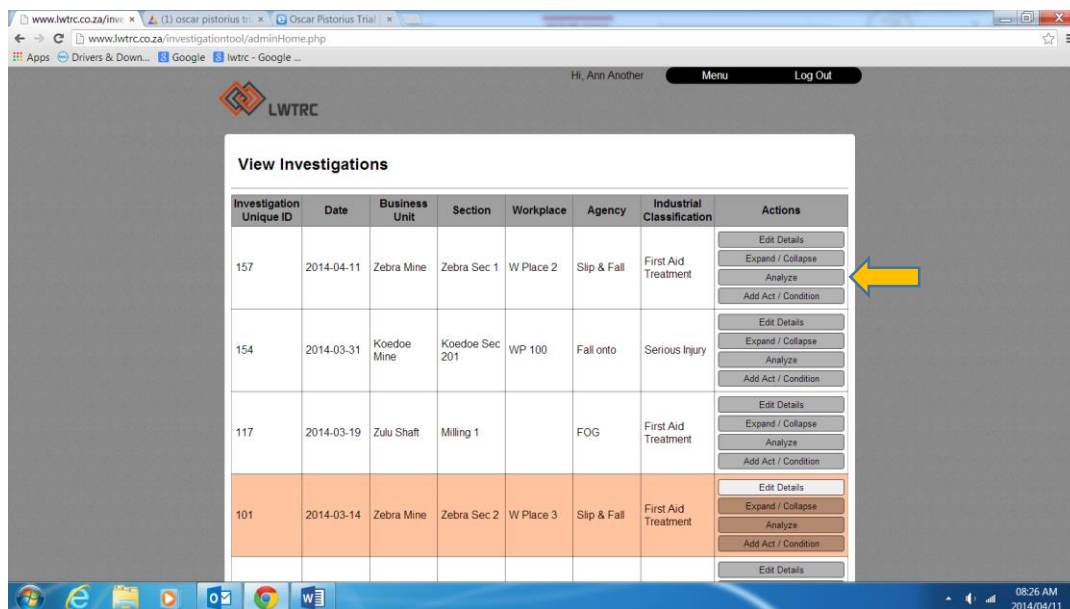
Investigation - Option 1

		Actions
Walking and talking on a cellphone		View Edit

154	2014-03-31	Koedoe Mine	Koedoe Sec 201	WP 100	Fall onto	Serious Injury	Edit Details Expand / Collapse Analyze Add Act / Condition
117	2014-03-19	Zulu Plant	Milling 1	Mill	Fire	Serious Injury	Edit Details Expand / Collapse Analyze

Information entered related to the specific investigation selected can now be viewed or edited. Whenever any changes are made please always click “Submit” at the bottom of the document.

“Analyze”



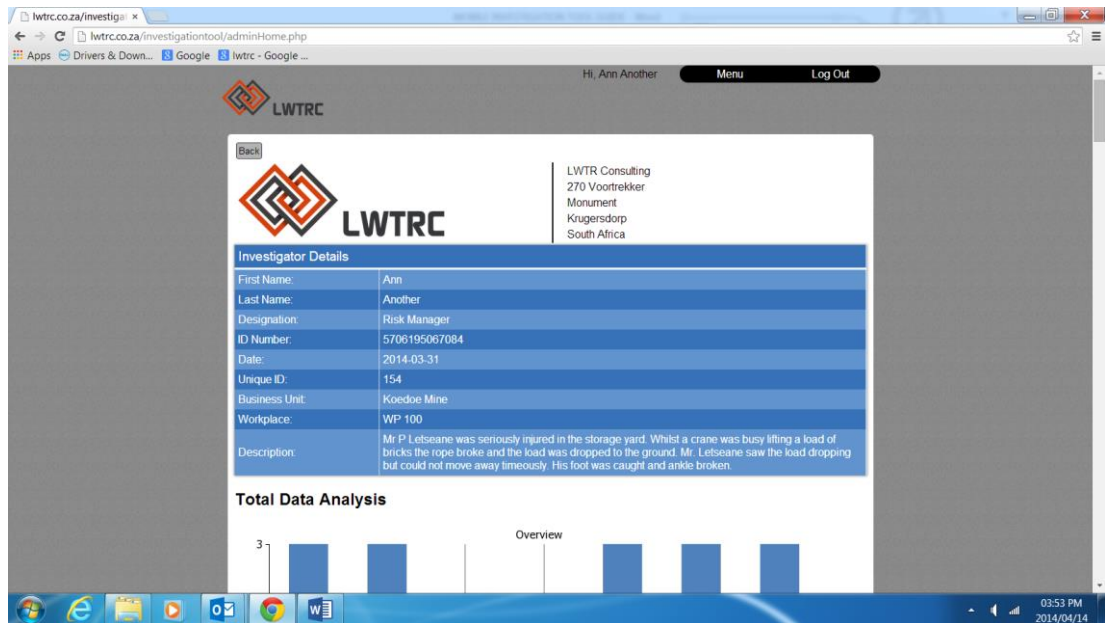
Hi, Ann Another [Menu](#) [Log Out](#)

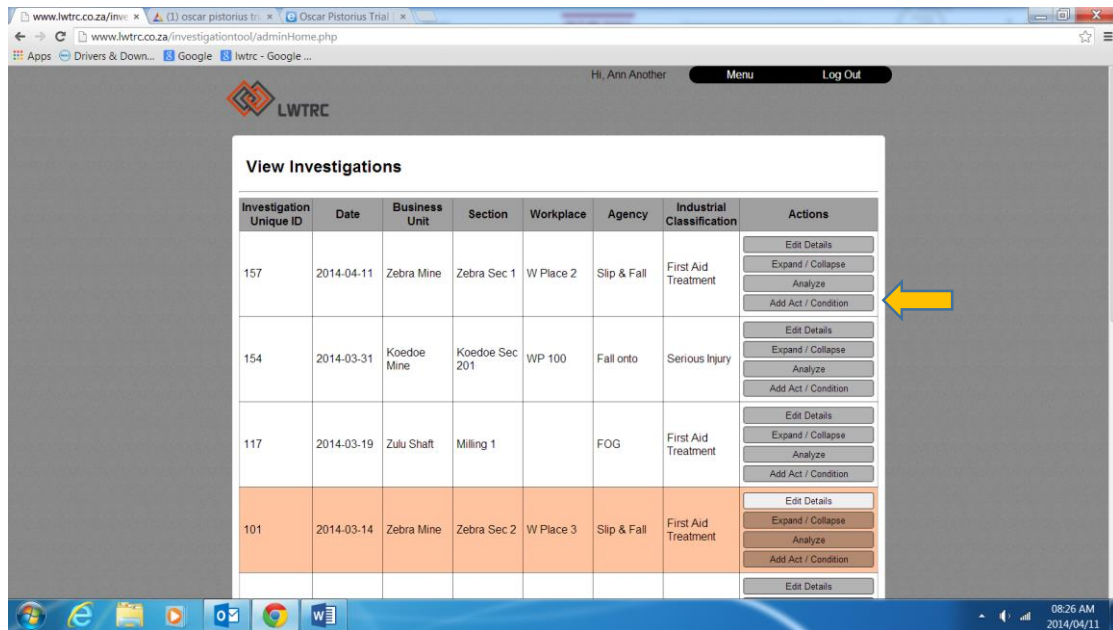
View Investigations

Investigation Unique ID	Date	Business Unit	Section	Workplace	Agency	Industrial Classification	Actions
157	2014-04-11	Zebra Mine	Zebra Sec 1	W Place 2	Slip & Fall	First Aid Treatment	Edit Details Expand / Collapse Analyze Add Act / Condition
154	2014-03-31	Koedoe Mine	Koedoe Sec 201	WP 100	Fall onto	Serious Injury	Edit Details Expand / Collapse Analyze Add Act / Condition
117	2014-03-19	Zulu Shaft	Milling 1		FOG	First Aid Treatment	Edit Details Expand / Collapse Analyze Add Act / Condition
101	2014-03-14	Zebra Mine	Zebra Sec 2	W Place 3	Slip & Fall	First Aid Treatment	Edit Details Expand / Collapse Analyze Add Act / Condition

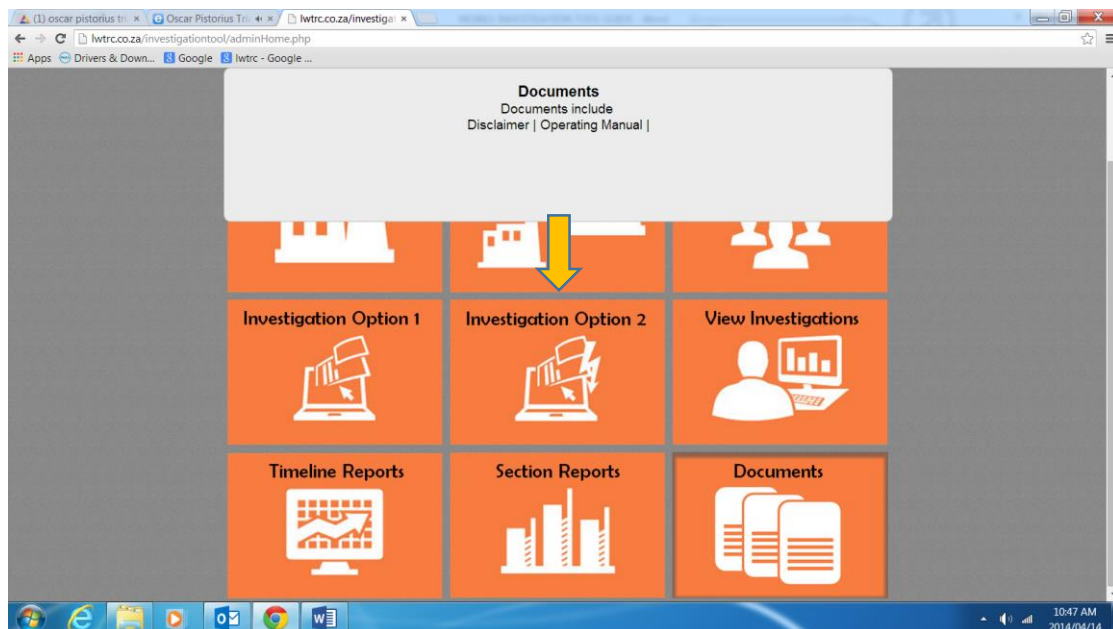
If the analyse button is selected the summary report for the specific event can be viewed.

The first part of the summary report shows the incident description.

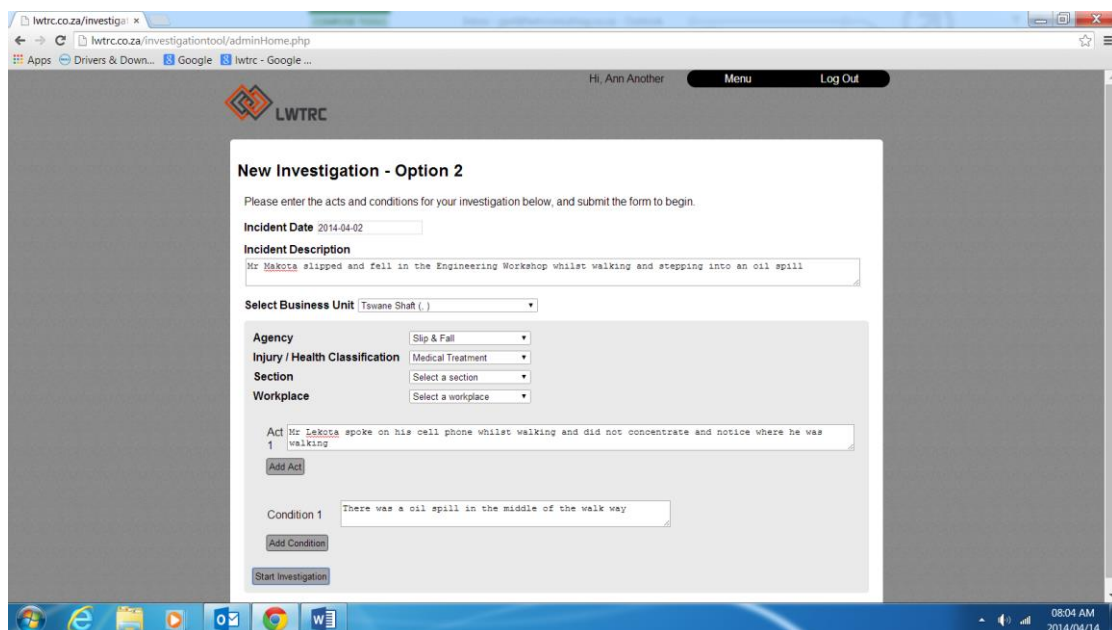




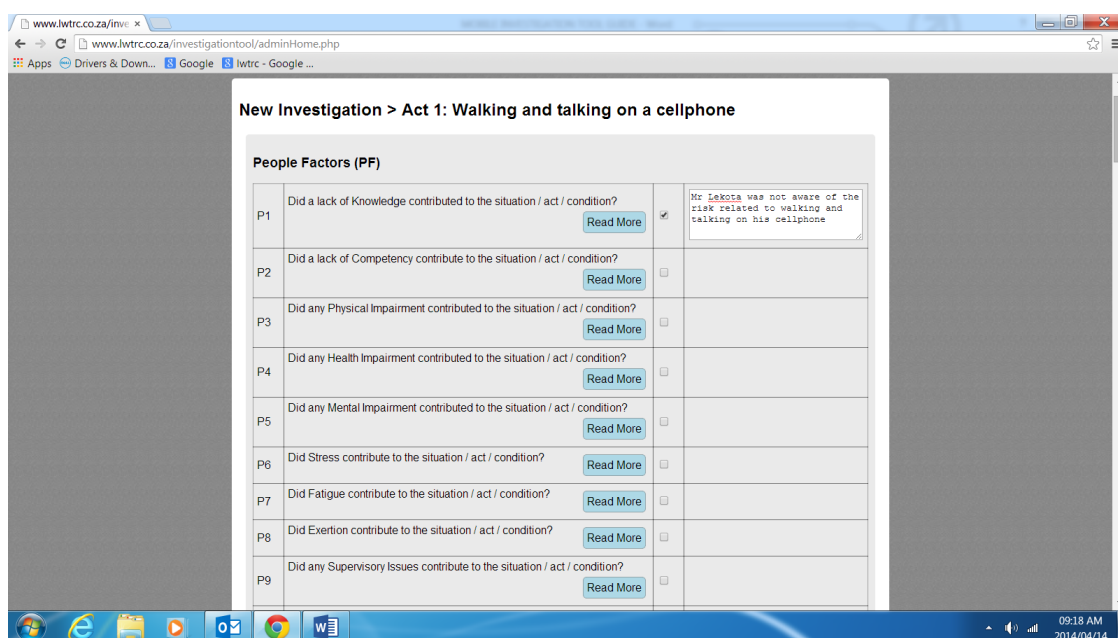
INVESTIGATION OPTION 2 – with this option the investigator analyse each Act and Condition considering the factors as outlined in the guiding items. This means that all 74 possible contributing factors must be considered for each act and each condition.



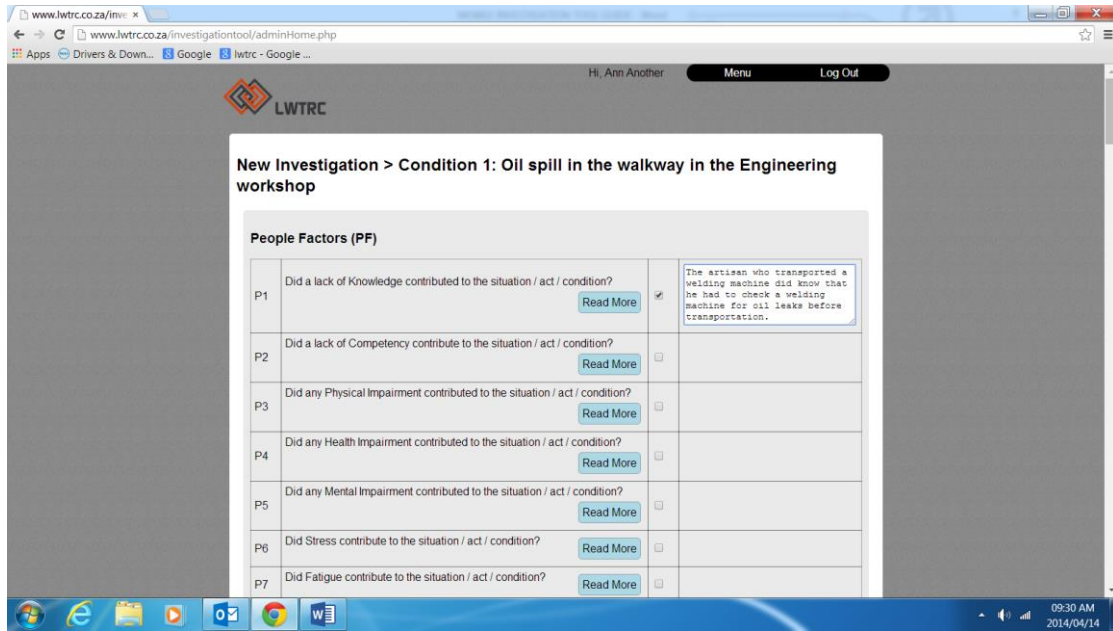
Only the unsafe acts and unsafe conditions that directly contributed to the event must be clearly described.



Contributing factors for each unsafe act and condition that contributed to the event are now ticked and described. The findings and recommendations are described in the same block.



People Factors (PF)		
P1	Did a lack of Knowledge contributed to the situation / act / condition?	<input checked="" type="checkbox"/> Read More <div>Mr Lekota was not aware of the risk related to walking and talking on his cellphone</div>
P2	Did a lack of Competency contribute to the situation / act / condition?	<input type="checkbox"/> Read More
P3	Did any Physical Impairment contributed to the situation / act / condition?	<input type="checkbox"/> Read More
P4	Did any Health Impairment contributed to the situation / act / condition?	<input type="checkbox"/> Read More
P5	Did any Mental Impairment contributed to the situation / act / condition?	<input type="checkbox"/> Read More
P6	Did Stress contribute to the situation / act / condition?	<input type="checkbox"/> Read More
P7	Did Fatigue contribute to the situation / act / condition?	<input type="checkbox"/> Read More
P8	Did Exertion contribute to the situation / act / condition?	<input type="checkbox"/> Read More
P9	Did any Supervisory Issues contribute to the situation / act / condition?	<input type="checkbox"/> Read More



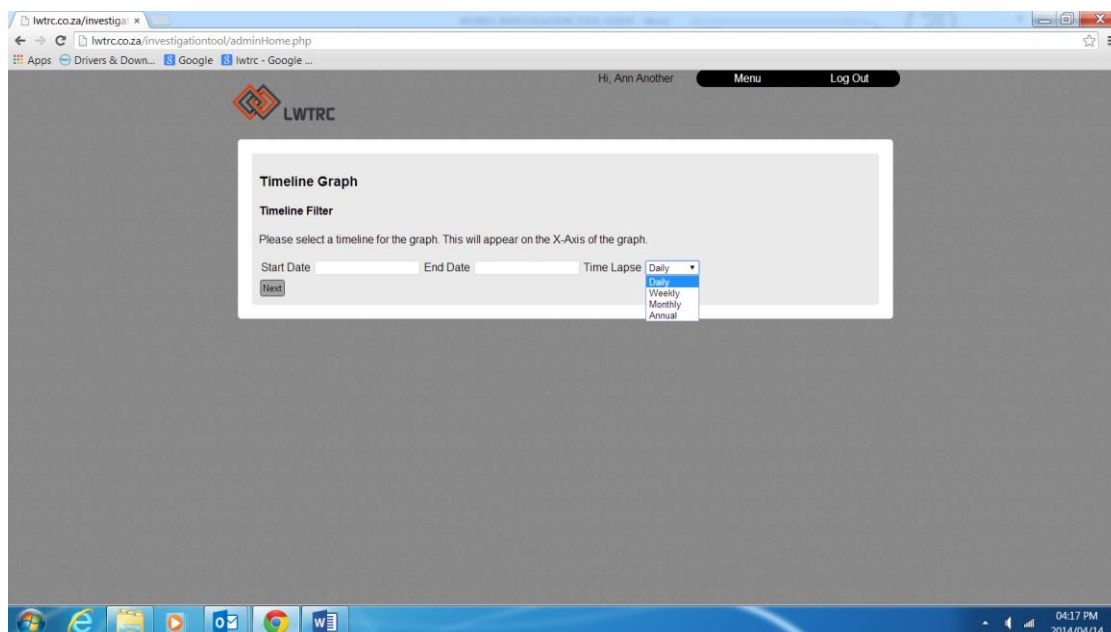
5. Summary Reports / Graphs

Timeline Reports

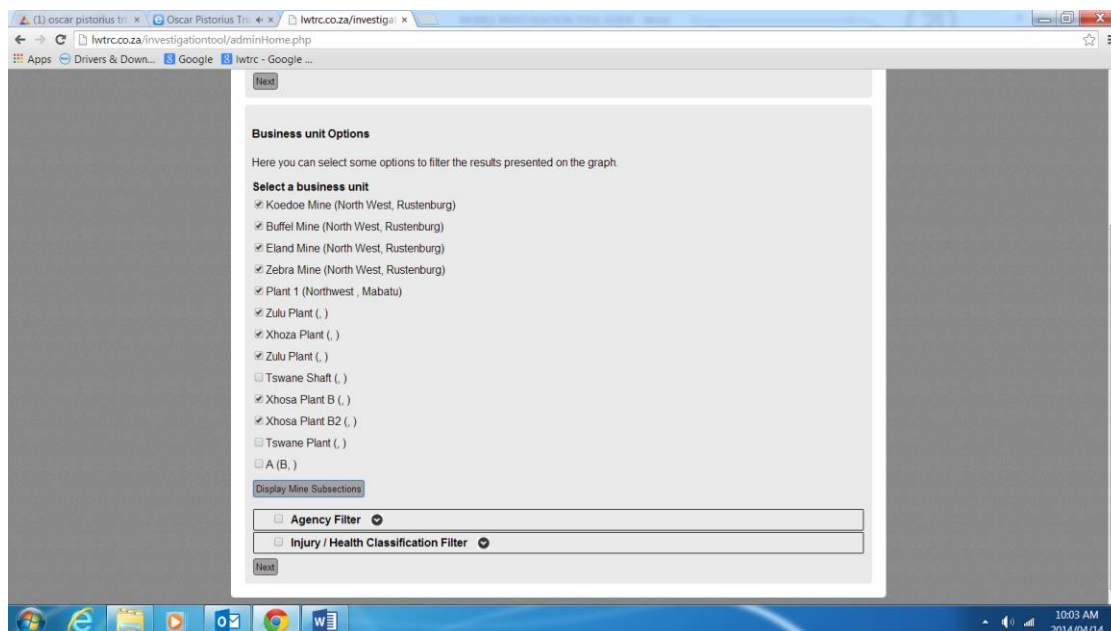
Timeline reports can be compiled for a selected period.



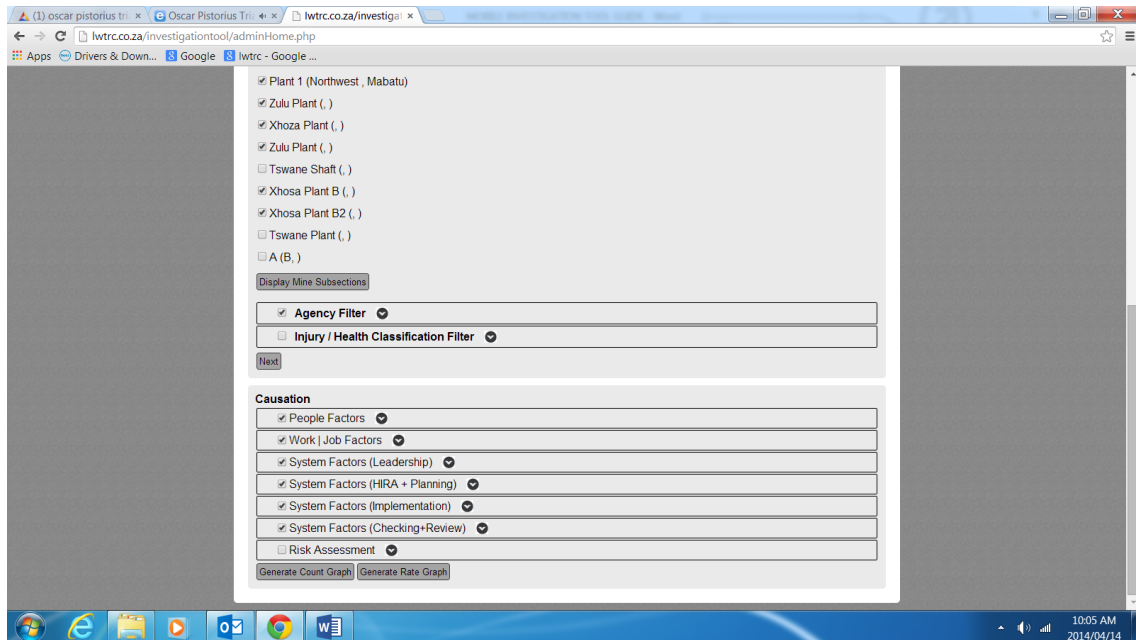
These reports can be drawn over a daily, weekly, monthly or quarterly period. Select then “next”.



The next screen gives an option to select the business units to be included into the graph. After selection of applicable business units select “**Agency Filter**” or “**Injury / Classification Filter**” or both as required. Then click “**Next**”.

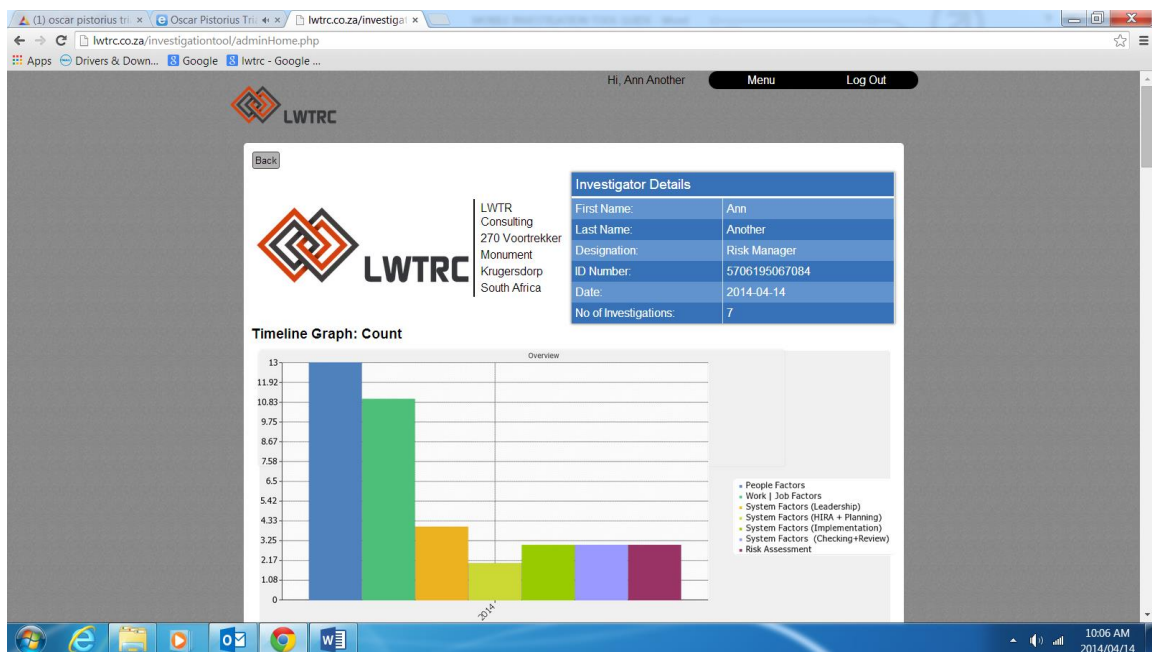


Now the contributing factors that contributed to events can be selected. At the bottom of the page the option is given where either a **“Count”** or a **“Trend”** graph can be selected.



The screenshot shows the LWTRC investigation tool interface. It includes a list of plants to select (Plant 1, Zulu Plant, Xhoza Plant, Zulu Plant, Tswane Shaft, Xhosa Plant B, Xhosa Plant B2, Tswane Plant, A (B)). There are filters for Agency and Injury/Health Classification. Below these are causation factors: People Factors, Work | Job Factors, System Factors (Leadership), System Factors (HIRA + Planning), System Factors (Implementation), System Factors (Checking+Review), and Risk Assessment. At the bottom, there are buttons for 'Generate Count Graph' and 'Generate Rate Graph'.

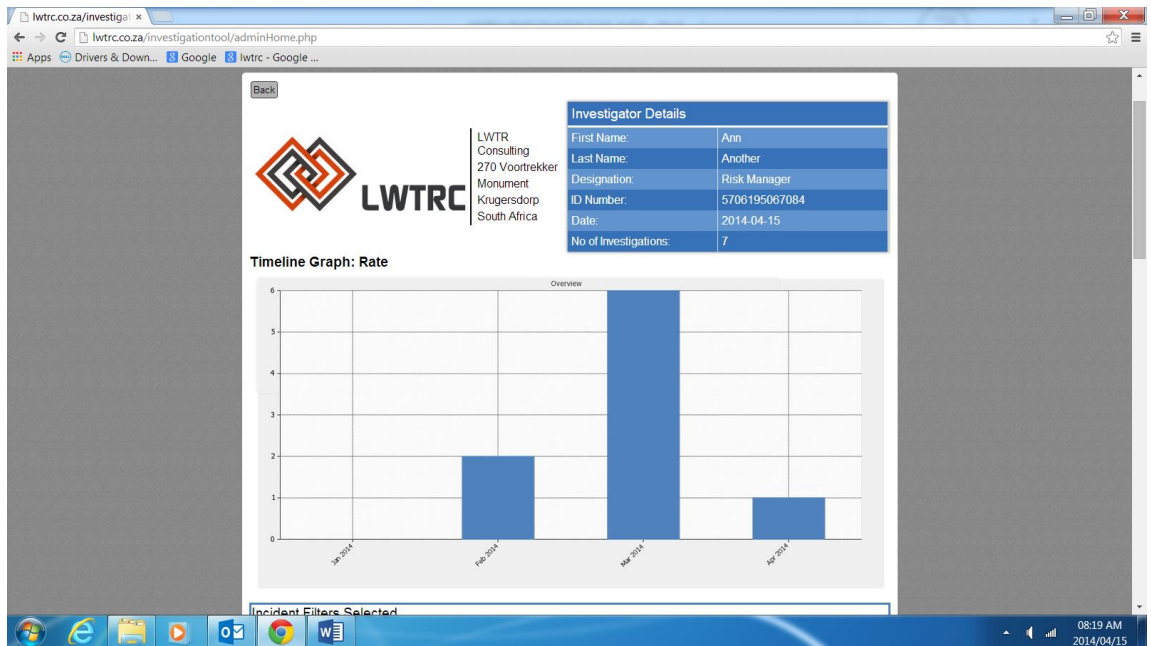
Below is an example of a **“Count Graph”** with its report. At the bottom of the report the option is given to convert the report into a PDF File and e-mail it if required.



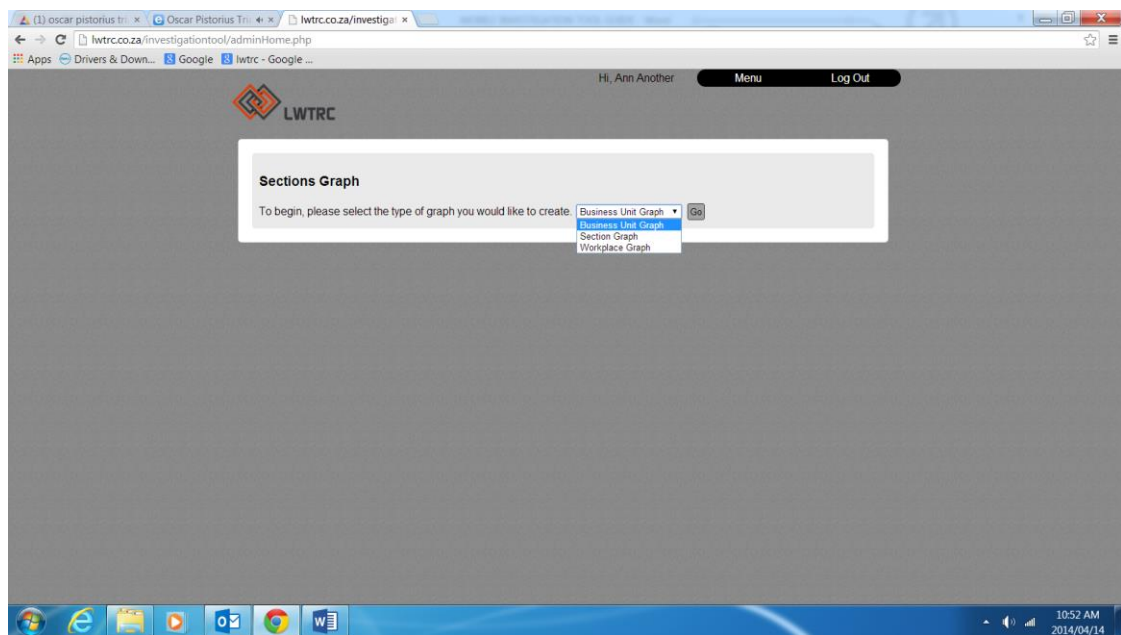
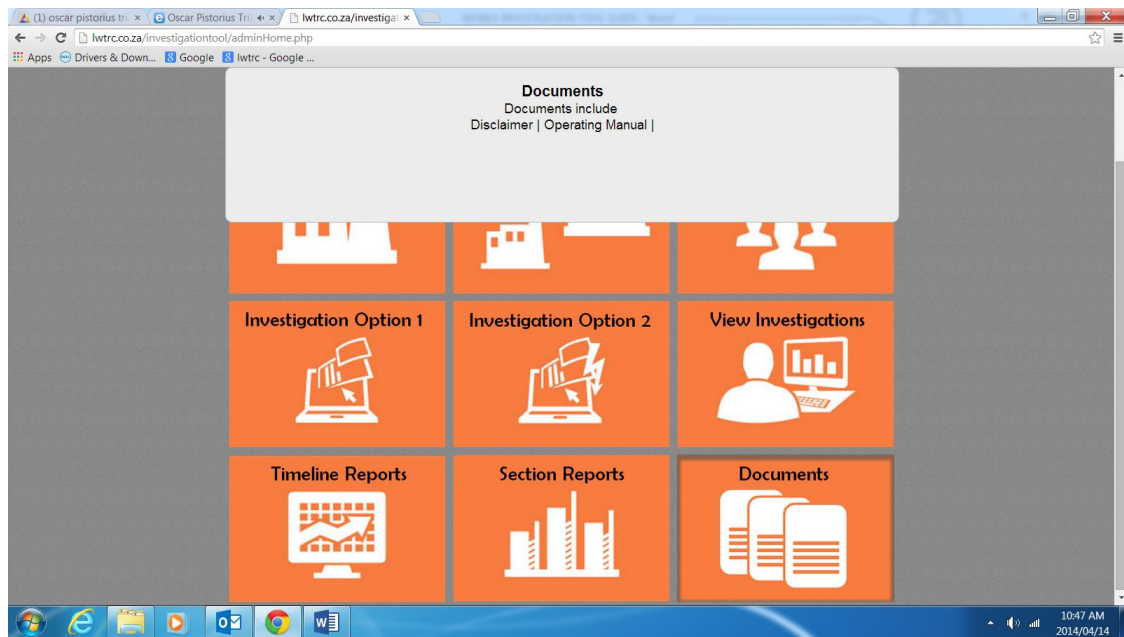
Investigation Tool Interface - Causation Filters Selected

People Factors	Work / Job Factors	System Factors (Leadership)	System Factors (HIRA + Planning)	System Factors (Implementation)	System Factors (Checking+Review)	Risk Assessment
P1 Knowledge	J1 Standard / Procedure	S1 Staffing / Man loading	S8 HIRA + Controls	S12 Responsibilities / Appointments	S24 Auditing	R1 Macro Risks + Controls
P2 Competency	J2 Specification	S2 Reward and Recognition	S9 Legislation / Legal	S13 Training / Needs / Competency	S25 Monitoring	R2 Micro Risks + Controls
P3 Physical Capability	J3 Code of Practice	S3 Incentive + Remuneration	S10 SMART Objectives	S14 Induction	S26 Inspection Process	R3 Pre-Planning RA
P4 Health	J4 Operating Procedures	S4 Disciplinary Process	S11 Plan to achieve Objectives	S15 Selection / Hiring / Placement	S27 Observations / BBO / PTO's	R4 Change Management
P5 Mental Capability	J5 Tools	S5 Cost / Budgets		S16 Communication	S28 Investigations	R5 RA Technique / Tool
P6 Stress	J6 Equipment	S6 Stability		S17 Document Control	S29 Incident Reporting	R6 RA Analysis
P7 Fatigue	J7 Machinery	S7 Social		S18 Quality Control	S30 Near Miss	R7 Hierarchy of Controls
P8 Exertion	J8 Material			S19 Maintenance	S31 Corrective Action	
P9 Supervisory Pressures	J9 Infrastructure			S20 Purchase / Procurement Process	S32 Pre Work Assessments	
P10 Production Pressures	J10 Utilities			S21 Performance Management	S33 Management Review	
P11 Relationships	J11 Design Criteria			S22 Contractor Management		
	J12 PPE			S23 Emergency Preparedness		
	J13 Occ Environment					

Trend Graph



Section Reports



Hi, Ann Another [Menu](#) [Log Out](#)

Sections Graph

To begin, please select the type of graph you would like to create: Business Unit Graph [Go](#)

Please select the business units you would like to include on the graph. Note: If you do not select any business units, it will be considered that you are selecting ALL business units.

- ☐ Koedoe Mine(North West, Rustenburg)
- ☒ Buffel Mine(North West, Rustenburg)
- ☒ Eland Mine(North West, Rustenburg)
- ☐ Zebra Mine(North West, Rustenburg)
- ☐ Plant 1(Northwest, Mabatu)
- ☒ Zulu Plant(,)
- ☒ Xhosa Plant(,)
- ☐ Zulu Plant(,)
- ☒ Tswane Shaft(,)
- ☒ Xhosa Plant B(,)
- ☐ Xhosa Plant B2(,)
- ☐ Tswane Plant(,)
- ☐ A(B,)

[Next](#)

[Next](#)

Timeline Filter

Please select a timeline for the graph. This will not appear on this graph; it will only act as a filter for the results presented.

Start Date: End Date:

☒ Inju ☐ Age

Causation

	Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3	4
<input checked="" type="checkbox"/> P	5	6	7	8	9	10	11
<input checked="" type="checkbox"/> W	12	13	14	15	16	17	18
<input checked="" type="checkbox"/> S	19	20	21	22	23	24	25
	26	27	28	29	30	31	

☒ System Factors (HRA + Planning) ☒

☒ System Factors (Implementation) ☒

☒ System Factors (Checking+Review) ☒

☒ Risk Assessment ☒

[Generate Count Graph](#) [Generate Rate Graph](#)

Investigation Tool Admin Home

zebra mine(north west, Rustenburg)
☐ Plant 1(Northwest, Mabatu)
☒ Zulu Plant()
☒ Xhosa Plant()
☐ Zulu Plant()
☒ Tswana Shaft()
☒ Xhosa Plant B()
☐ Xhosa Plant B2()
☐ Tswana Plant()
☐ A(B,)

Next

Timeline Filter

Please select a timeline for the graph. This will not appear on this graph, it will only act as a filter for the results presented.

Start Date: End Date:

☒ Injury / Health Classification Filter

☐ Agency Filter

Causation

☒ People Factors

☒ Work / Job Factors

☒ System Factors (Leadership)

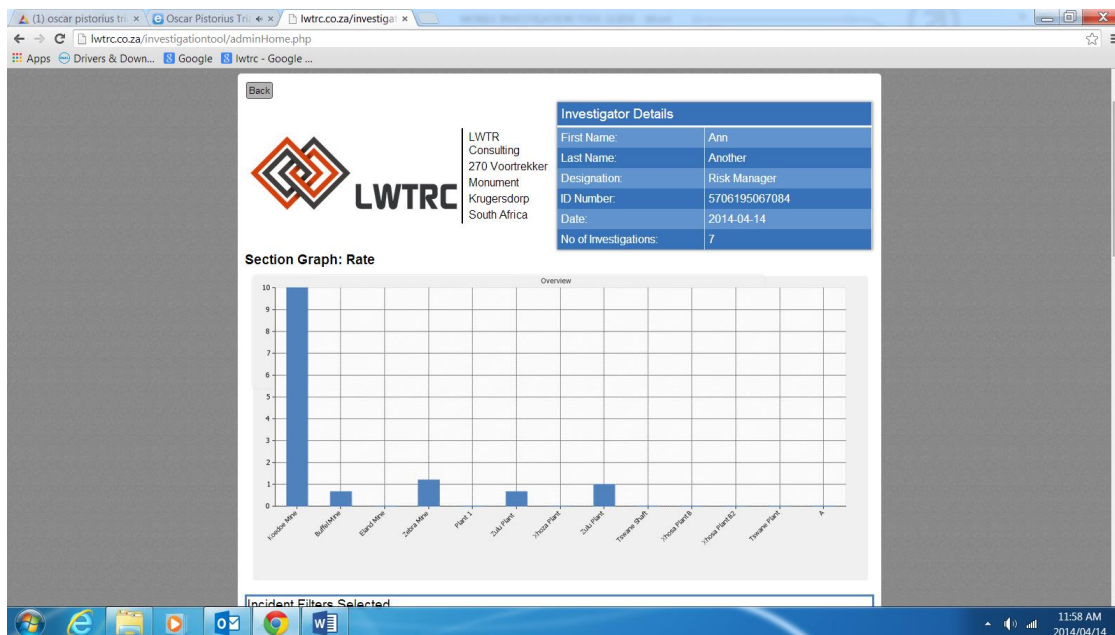
☒ System Factors (HRA + Planning)

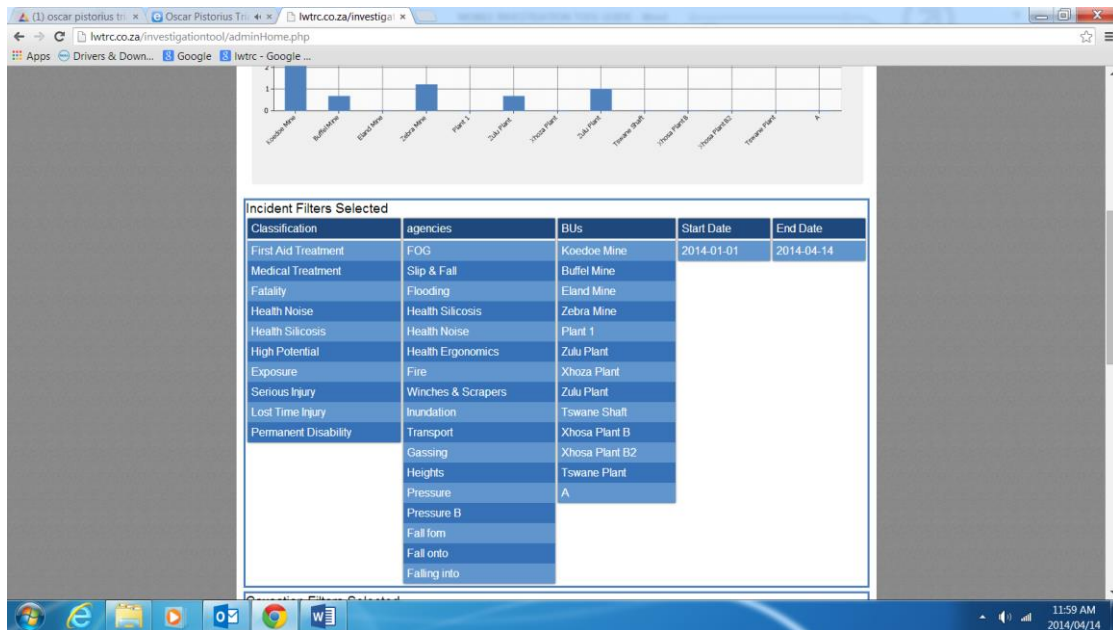
☒ System Factors (Implementation)

☒ System Factors (Checking+Review)

☒ Risk Assessment

Generate Count Graph Generate Rate Graph





The screenshot shows the LWTRC investigation tool interface with the 'Causation Filters Selected' table displayed below the incident filters.

People Factors	Work / Job Factors	System Factors (Leadership)	System Factors (HIRA + Planning)	System Factors (Implementation)	System Factors (Checking+Review)	Risk Assessment
P1 Knowledge	J1 Standard / Procedure	S1 Staffing / Man loading	S8 HIRA + Controls	S12 Responsibilities / Appointments	S24 Auditing	R1 Macro Risks + Controls
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P7 Fatigue	J7 Machinery	S7 Social		S18 Quality Control	S30 Near Miss	R7 Hierarchy of Controls
P8 Eviction	J8 Material			S19 Maintenance	S31 Corrective Action	